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**Supporting Information for**

# New Riches in Carbaporphyrin Chemistry: Silver and Gold Organometallic Complexes of Benzocarbaporphyrins.

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| S6-S22 | Selected proton and carbon-13 NMR spectra. |
| S23-S31 | Selected mass spectra. |

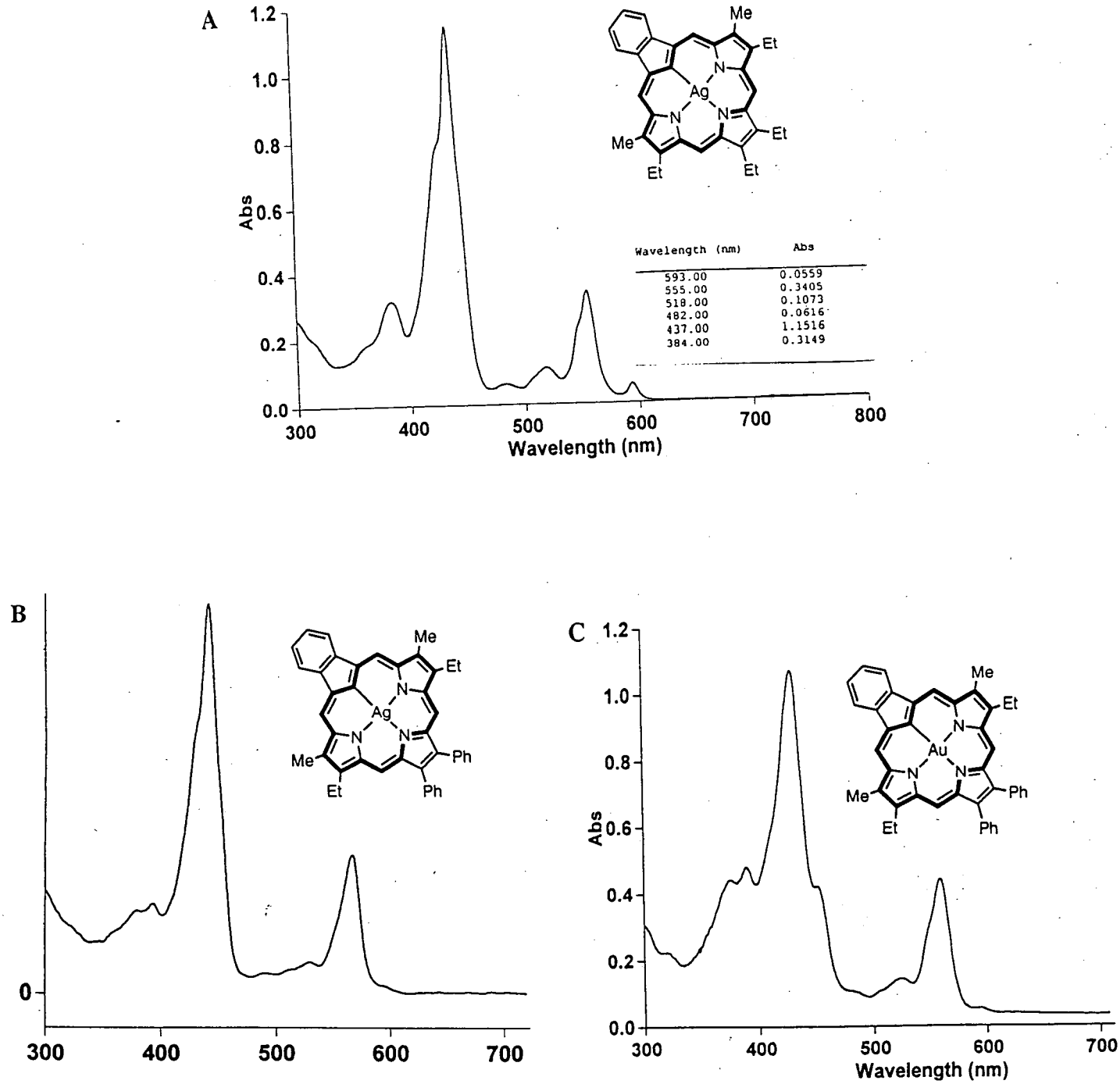



Figure S1: Uv-Vis spectra of metallocarbaporphyrins in chloroform.
A. Silver(III) derivative **15a**. B. Silver(III) diphenylcarbaporphyrin **15b**.
C. Gold(III) diphenylcarbaporphyrin **19**.

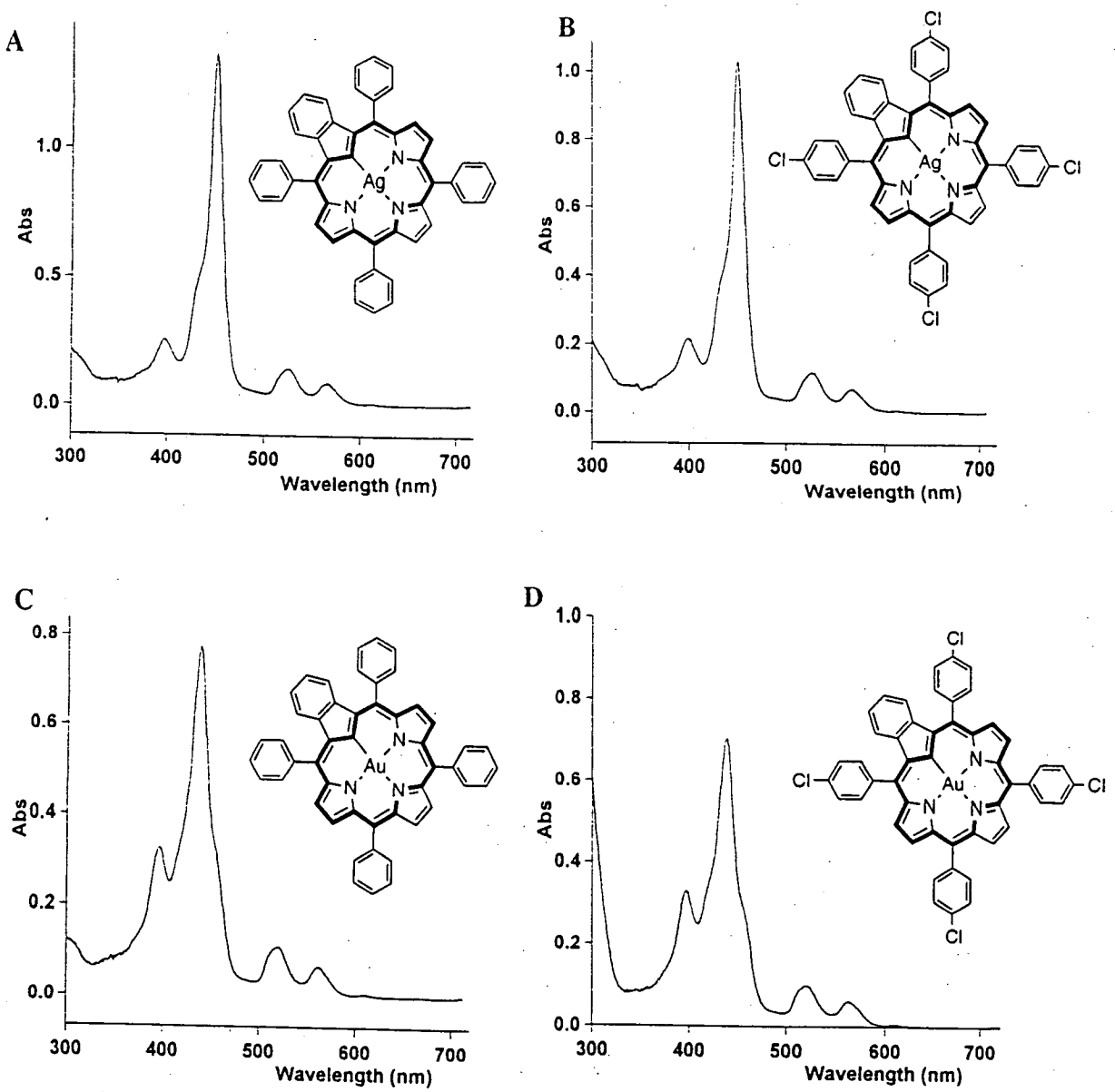



Figure S2: Uv-Vis spectra of silver(III) and gold(III)carbaporphyrins in chloroform.
A. **17a**. B. **17b**. C. **18a**. D. **18b**.

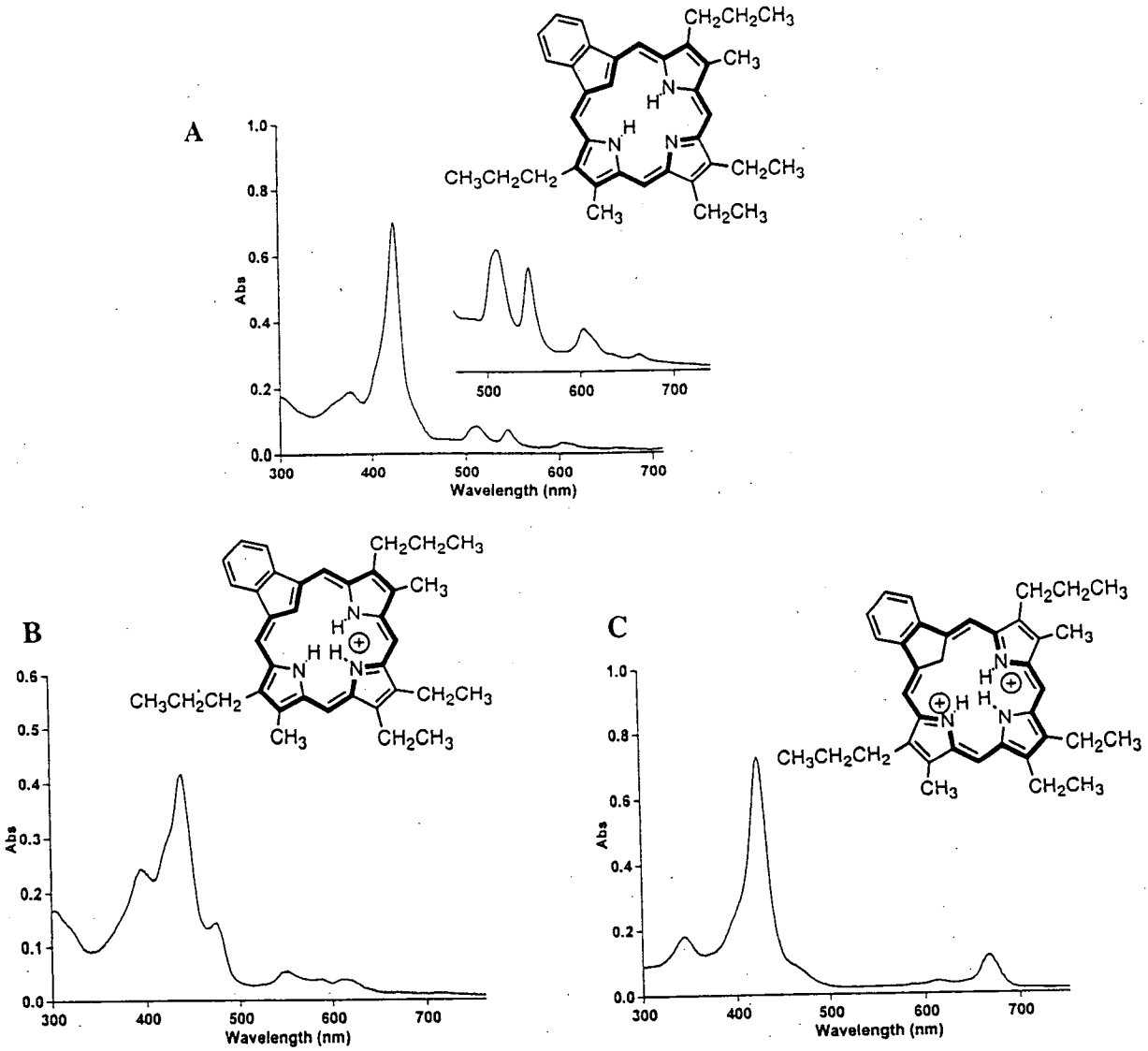



Figure S3: UV-Vis spectra of dipropylcarbaporphyrin **9d**. A. Free base in 1% $Et_3N$-$CHCl_3$. B. Monocation in 0.05% TFA-$CHCl_3$. C. Dication in 50% TFA-$CHCl_3$.

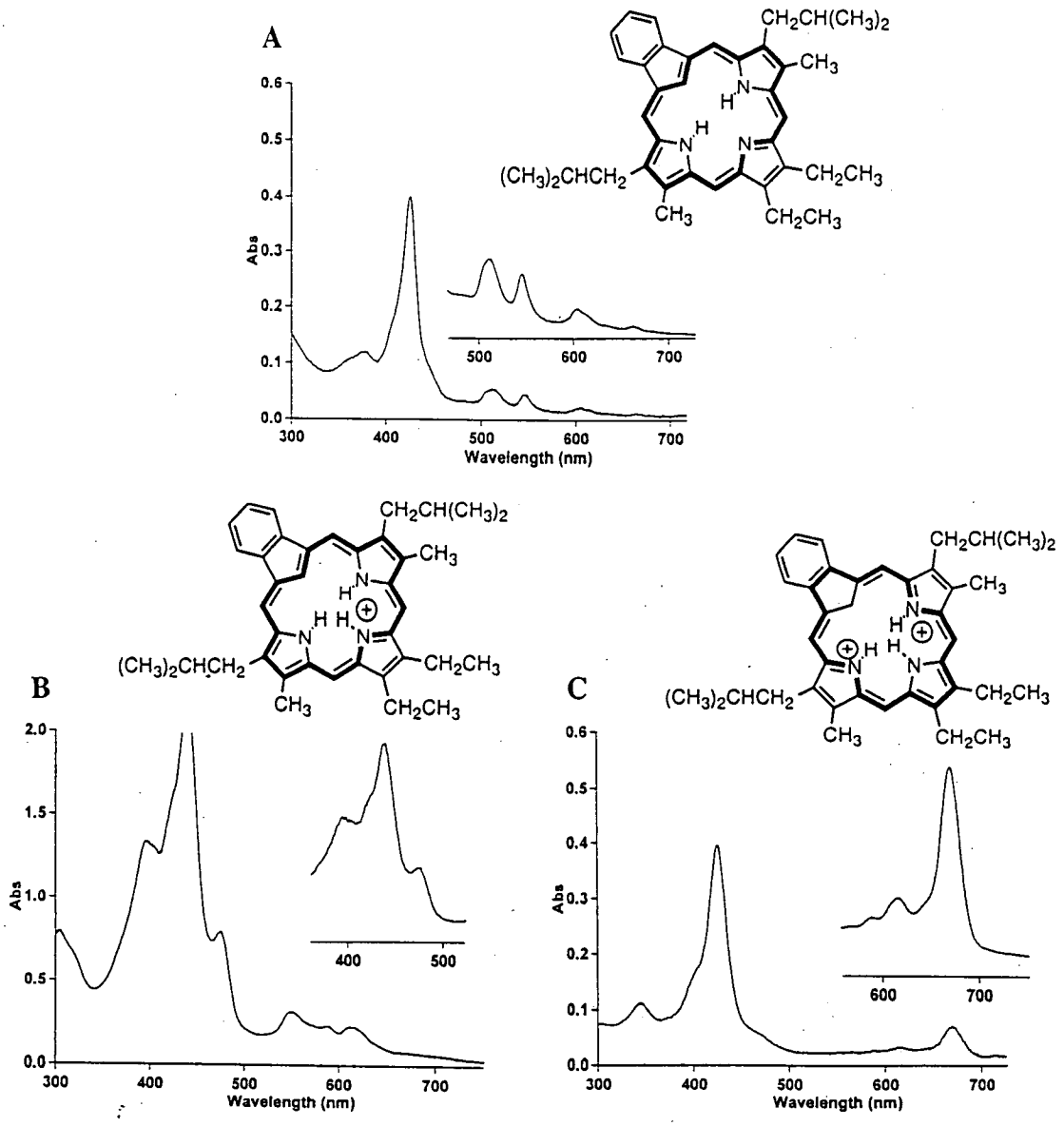



Figure S4: UV-Vis spectra of diisobutylcarbaporphyrin **9e**. A. Free base in 1% $Et_3N$-$CHCl_3$. B. Monocation in 0.05% TFA-$CHCl_3$. C. Dication in 50% TFA-$CHCl_3$.

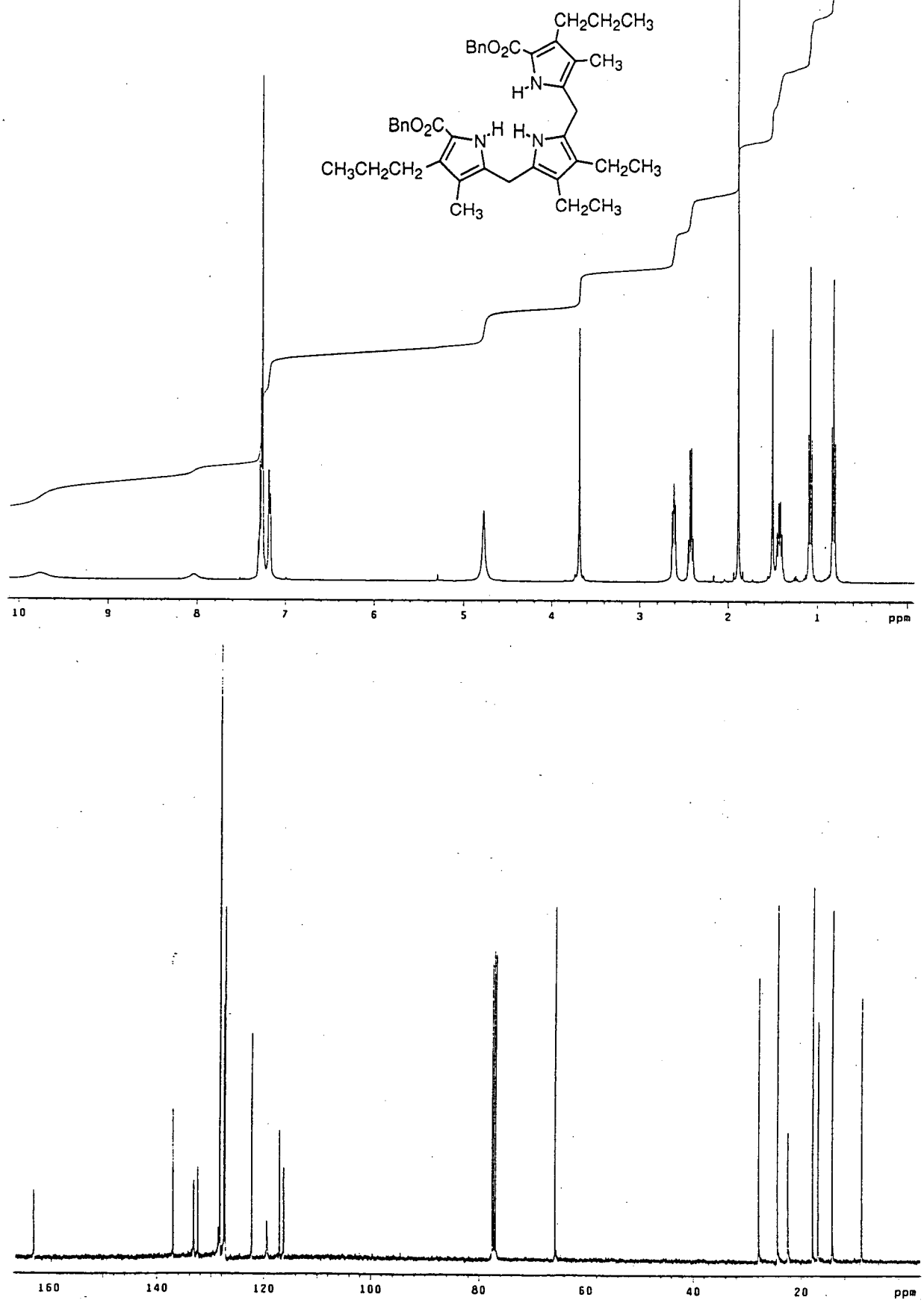



Figure S5: Upper spectrum: 400 MHz proton NMR spectrum of dipropyltripyrrane **14d** in $CDCl_3$.
Lower spectrum: 100 MHz carbon-13 NMR spectrum of dipropyltripyrrane **14d** in $CDCl_3$.

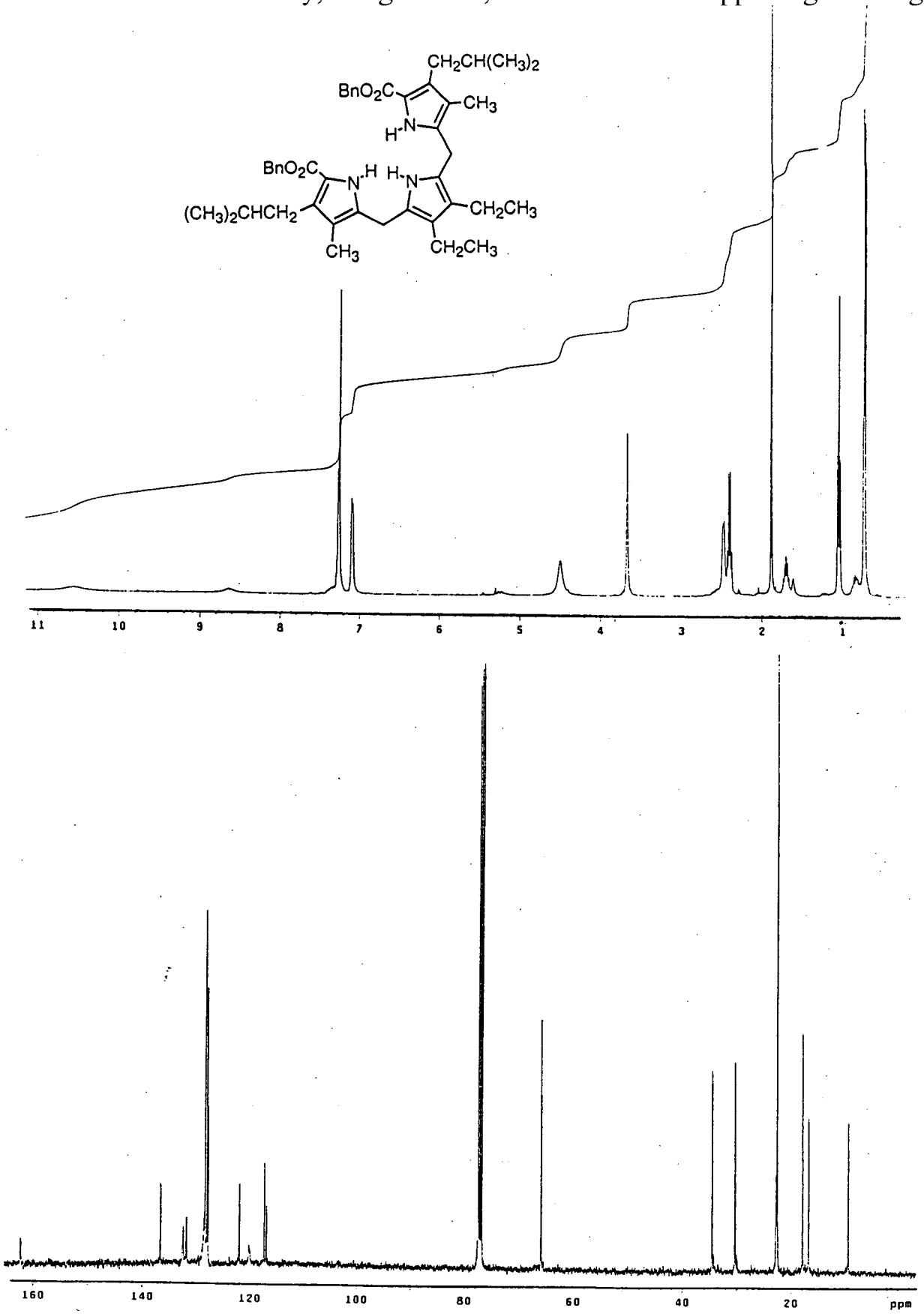



Figure S6: Upper spectrum: 400 MHz proton NMR spectrum of diisobutyltripyrrane **14e** in $CDCl_3$.
Lower spectrum: 100 MHz carbon-13 NMR spectrum of diisobutyltripyrrane **14e** in $CDCl_3$.

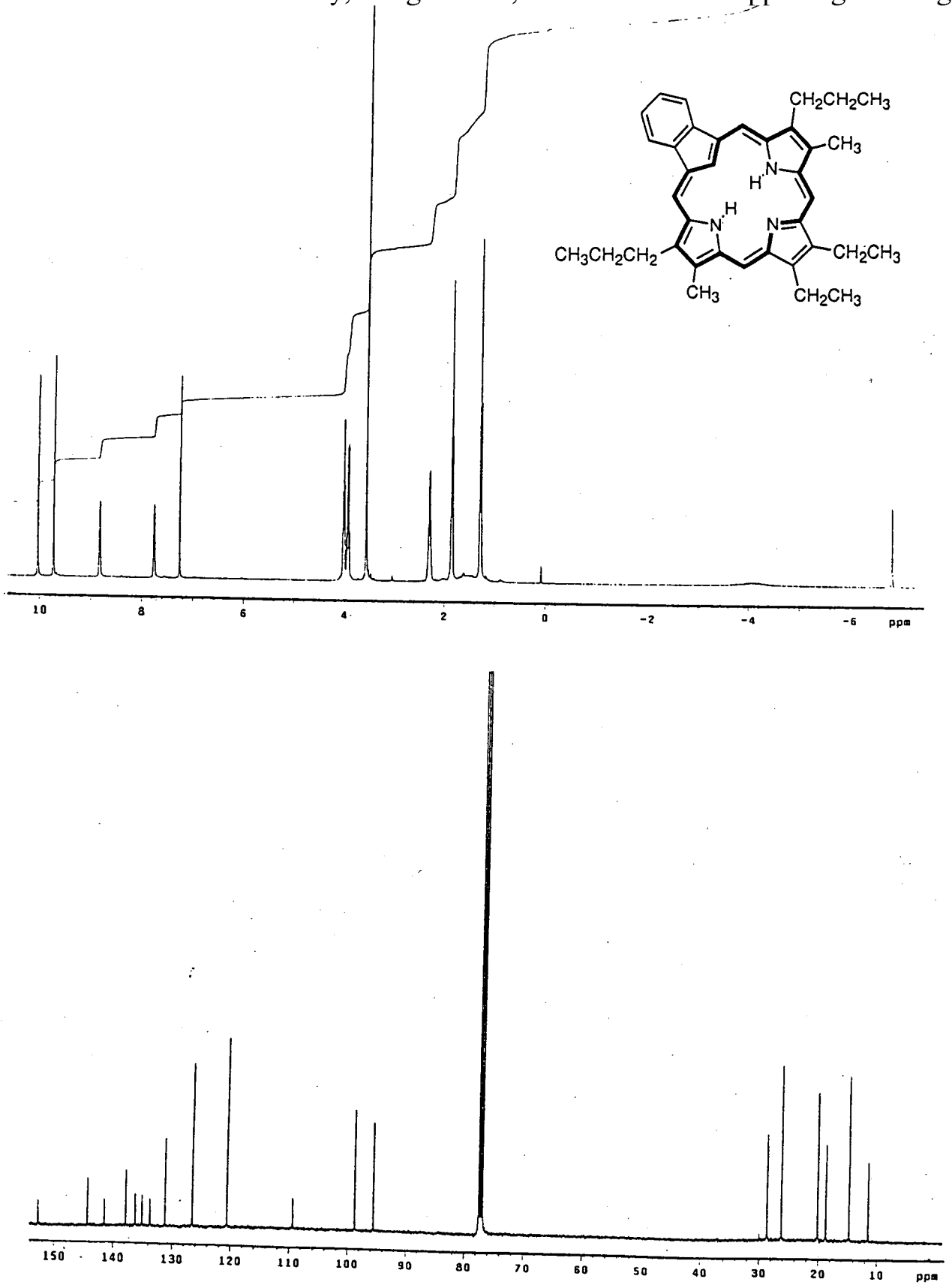



Figure S7: NMR Spectra of dipropylbenzocarbaporphyrin **9d** in $CDCl_3$.
Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.

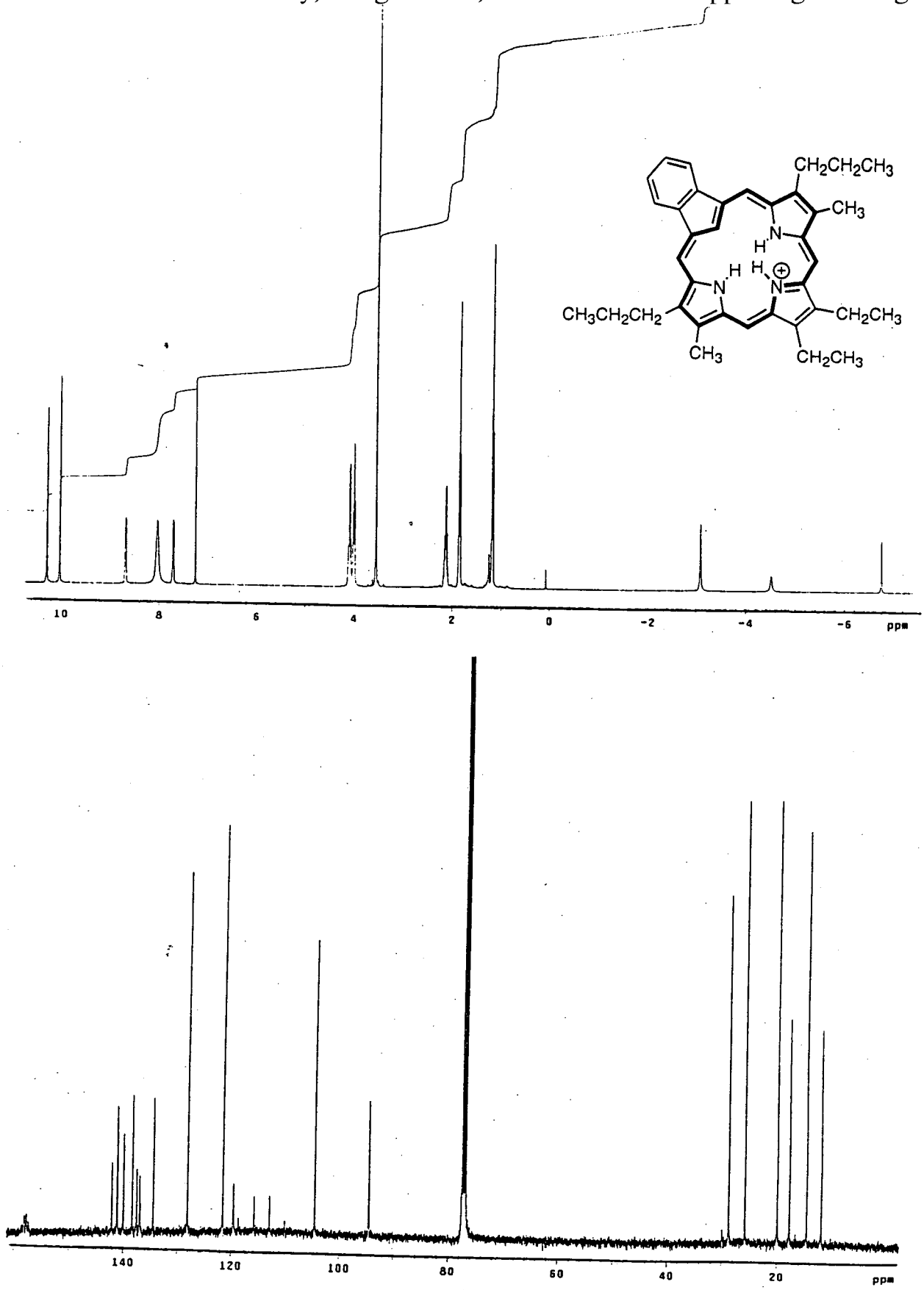



Figure S8: NMR Spectra of the monocation for dipropylbenzocarbaporphyrin **9d** in trace TFA-$CDCl_3$. Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.

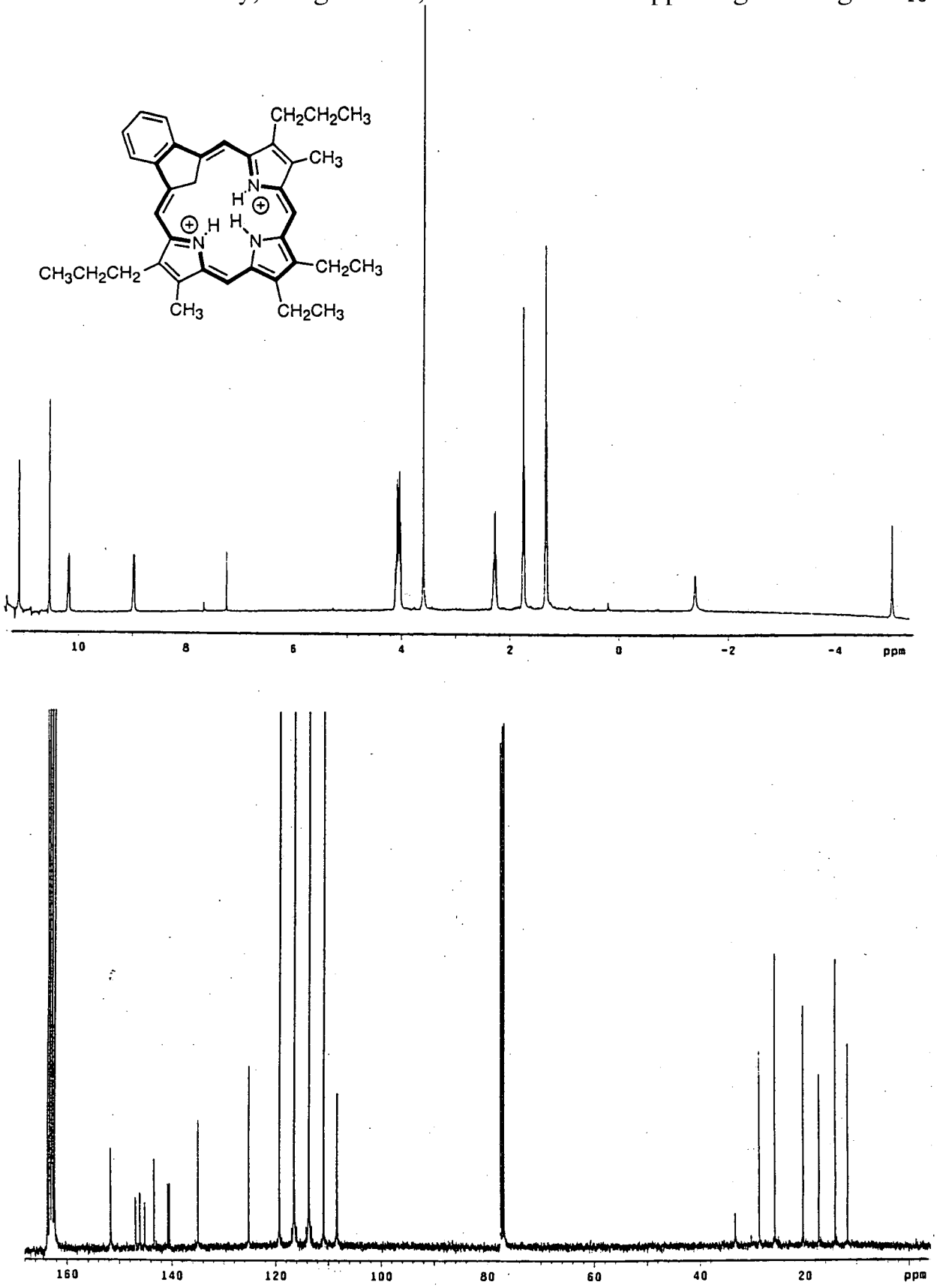



Figure S9: NMR Spectra of the dication of dipropylbenzocarbaporphyrin **9d** in 50% TFA-$CDCl_3$. Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.

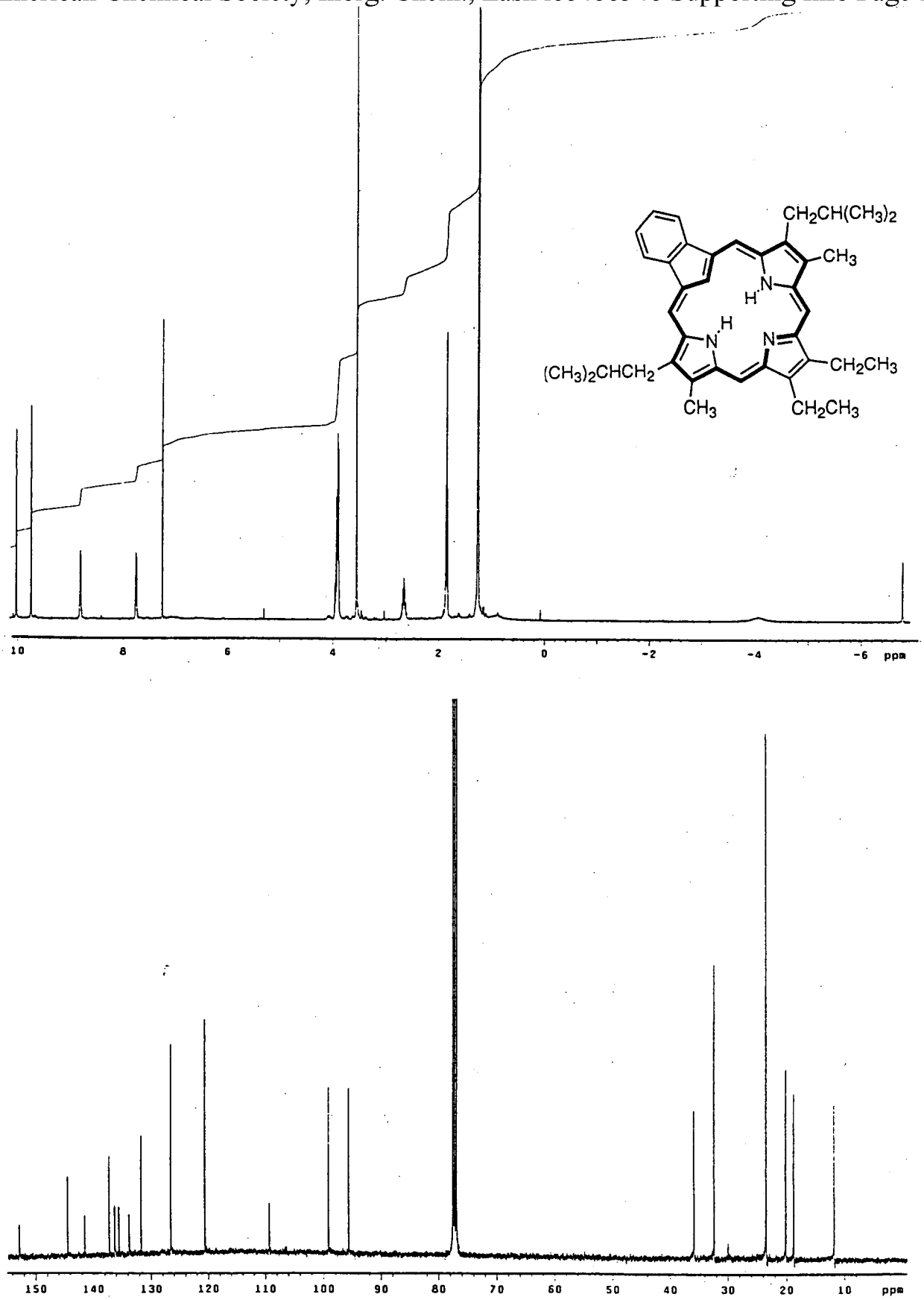



Figure S10: NMR Spectra of free base diisobutylbenzocarbaporphyrin **9e** in $CDCl_3$.
Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.

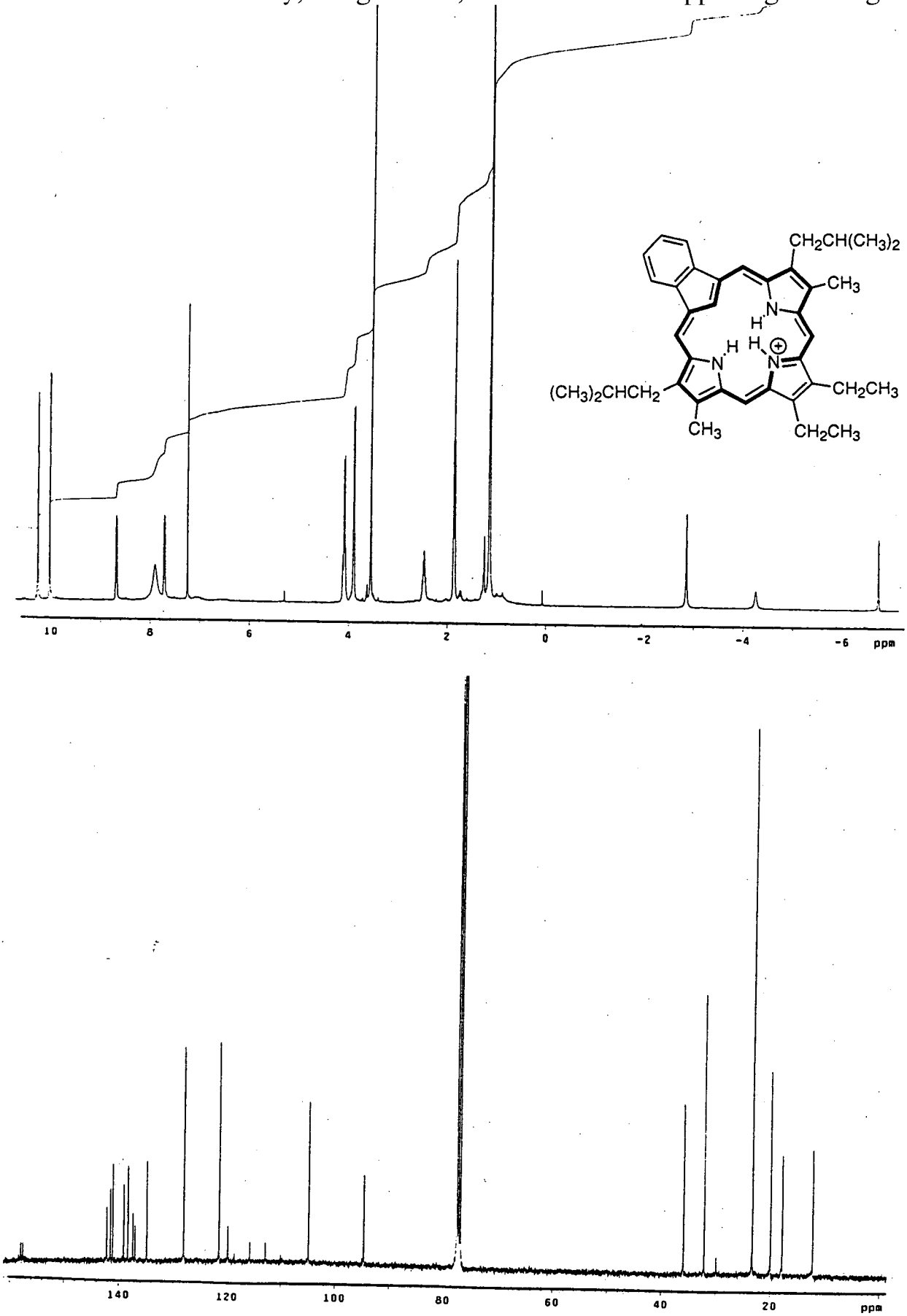



Figure S11: NMR Spectra of the monocation for diisobutylbenzocarbaporphyrin **9e** in trace TFA-$CDCl_3$. Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.

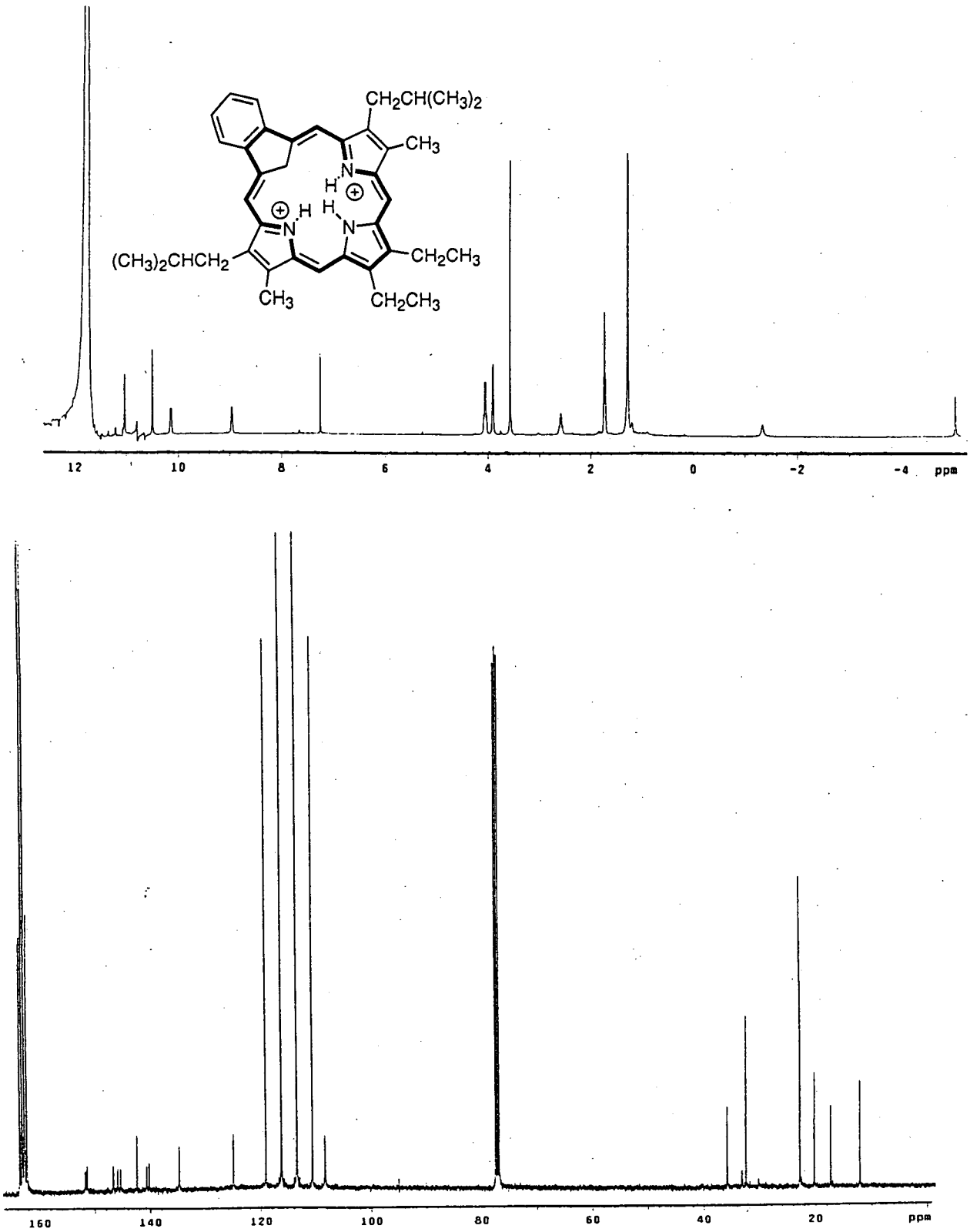
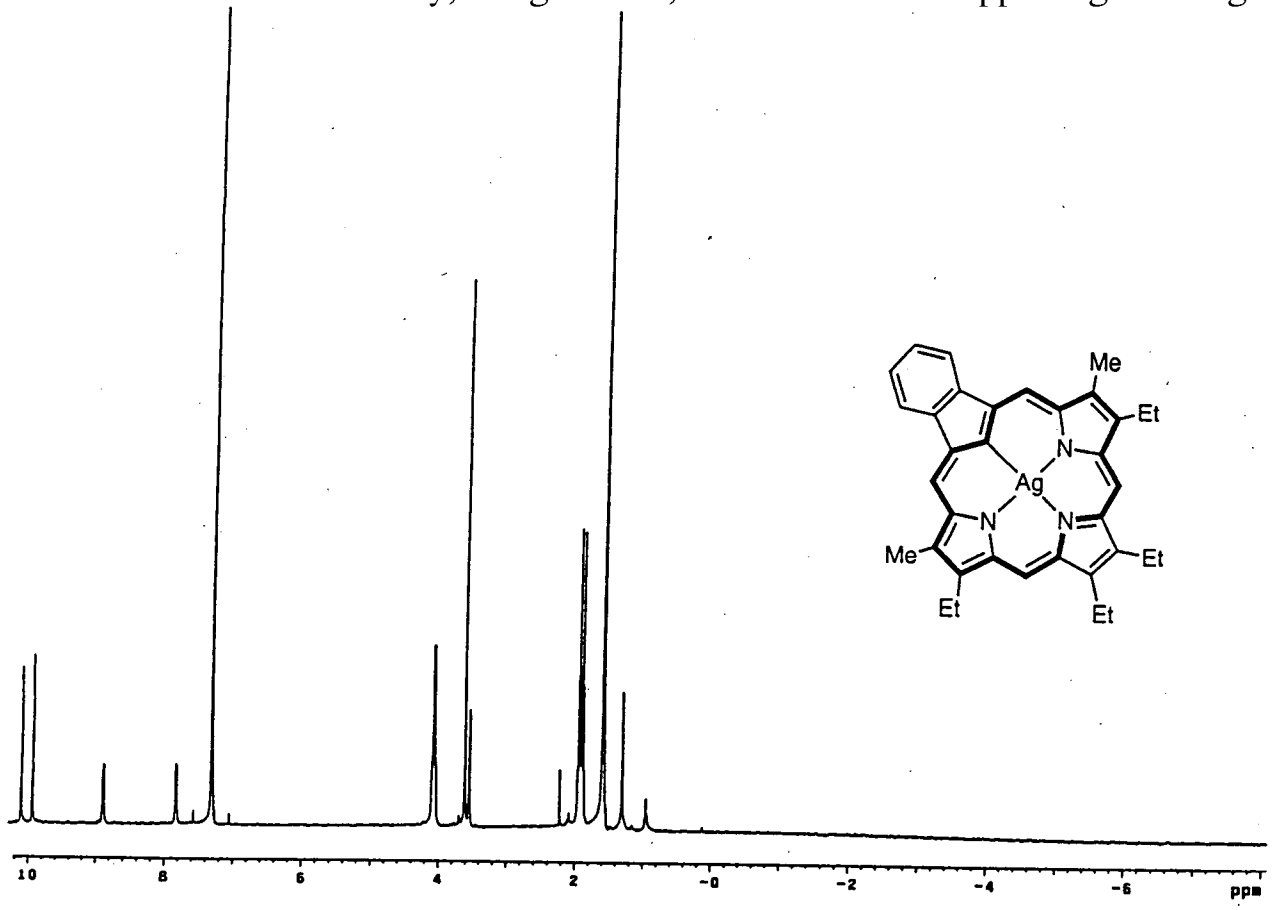



Figure S12: NMR Spectra of the dication of diisobutylbenzocarbaporphyrin **9e** in 50% TFA-$CDCl_3$. Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.



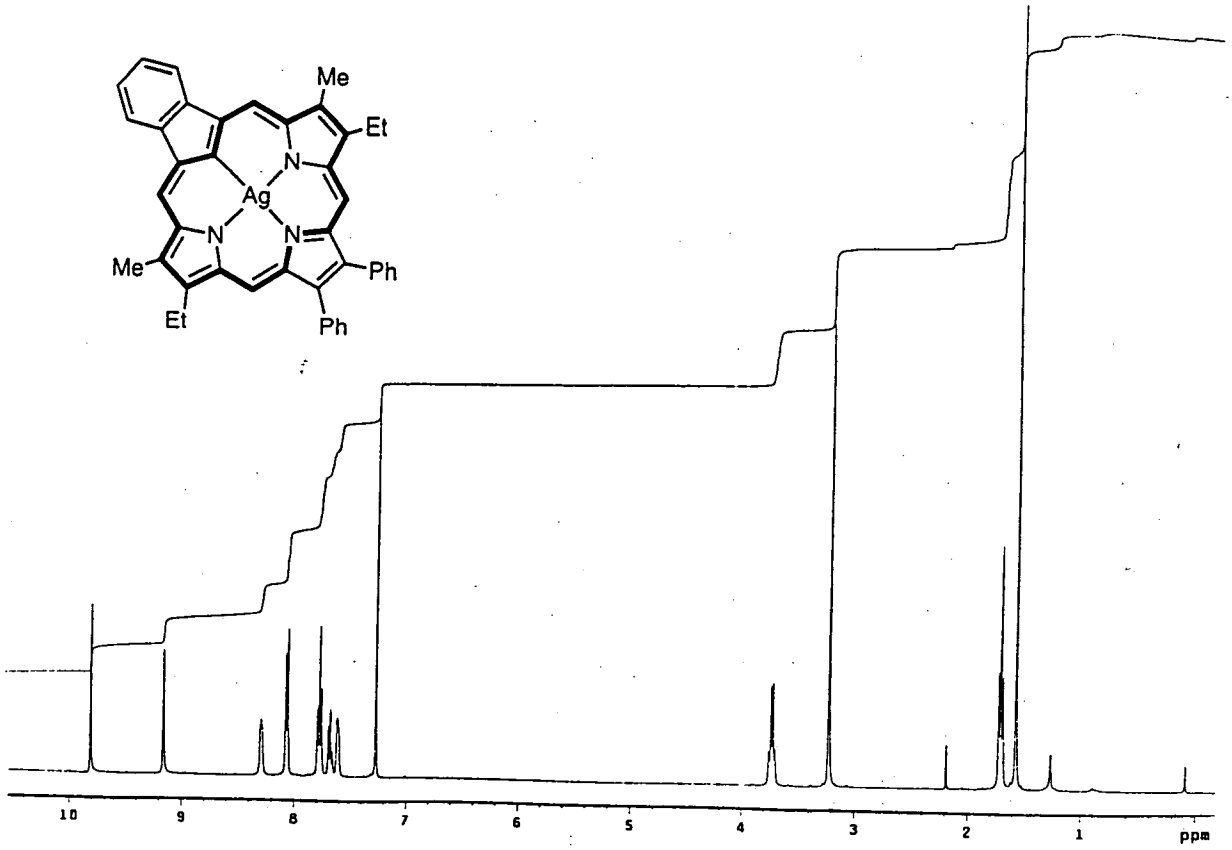
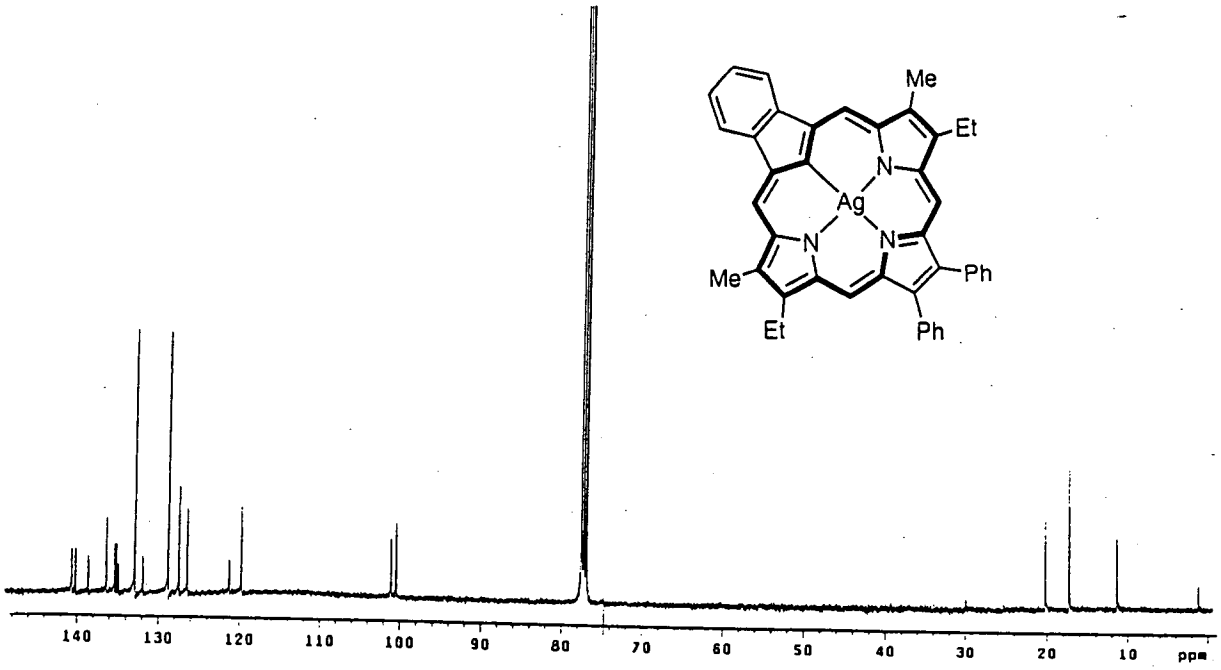




Figure S13: Upper spectrum: 400 MHz Proton NMR Spectrum of Silver(III) Complex **15a** in $CDCl_3$.
Lower spectrum: 400 MHz Proton NMR Spectrum of Diphenyl Ag(III) Complex **15b** in $CDCl_3$.



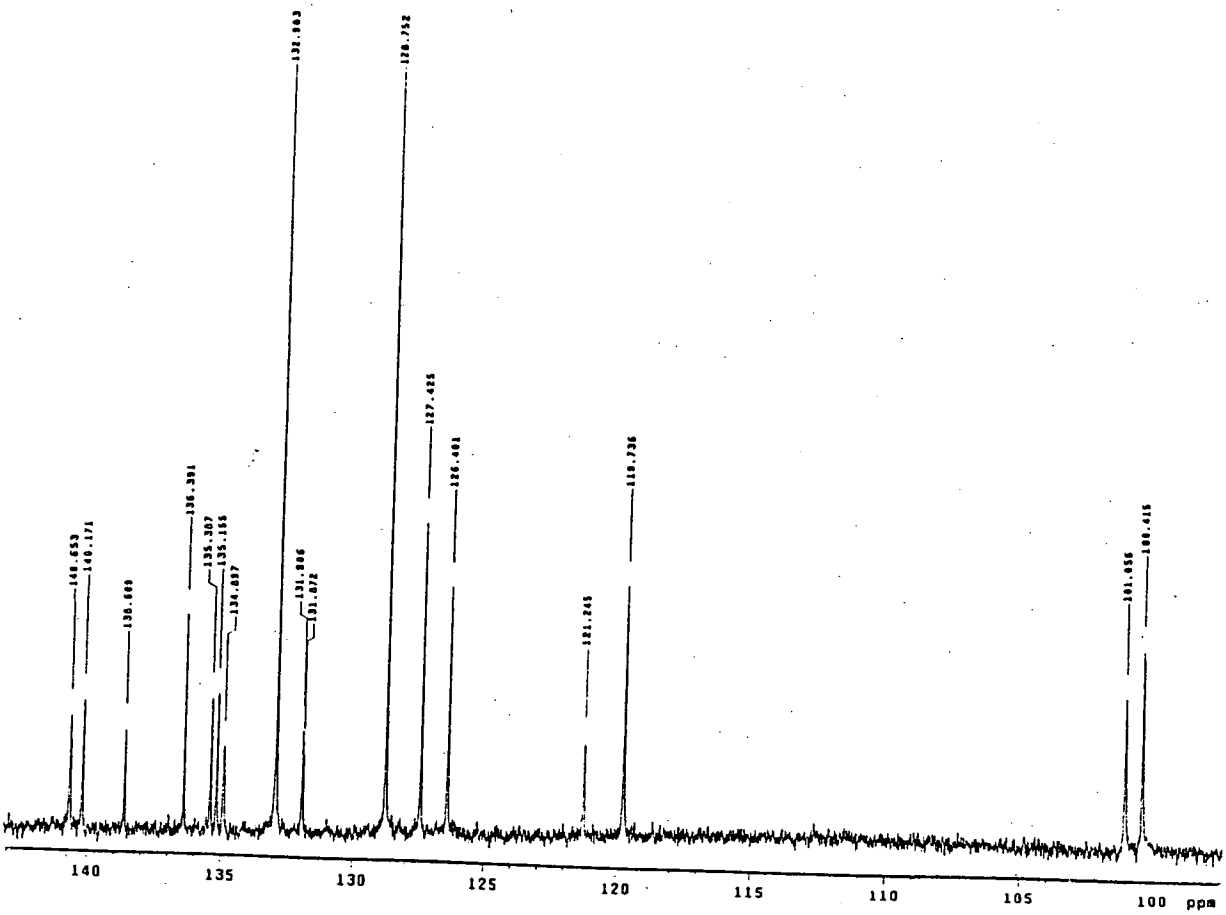
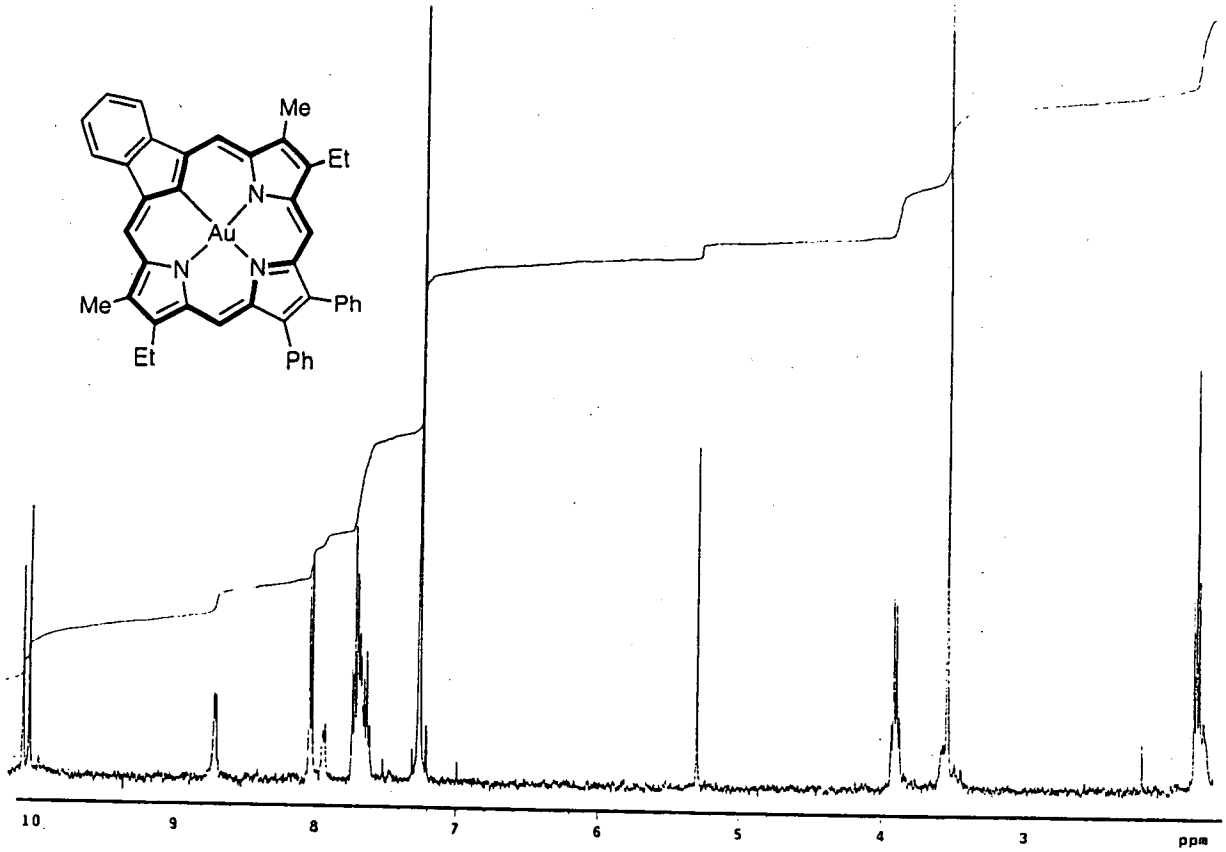




Figure S14: 100 MHz Carbon-13 NMR Spectrum of Diphenyl Ag(III) Complex **15b** in $CDCl_3$.



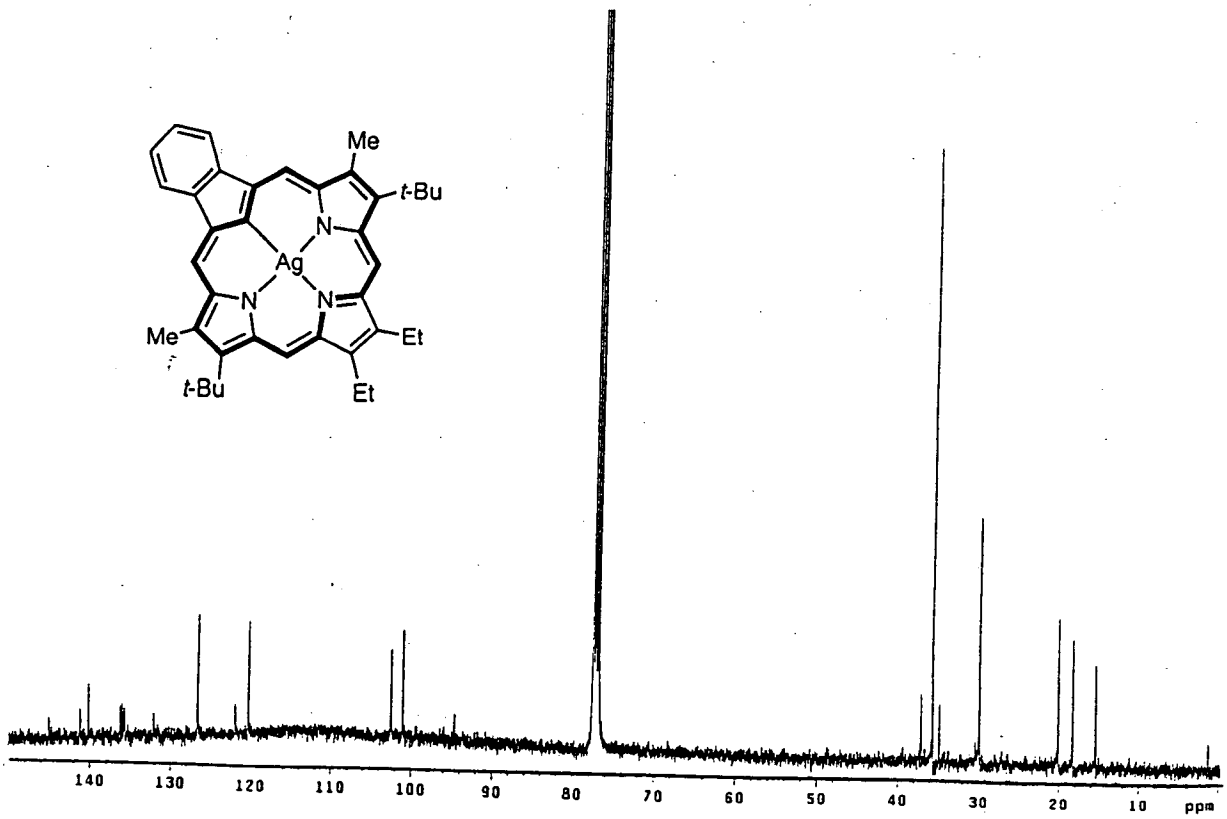
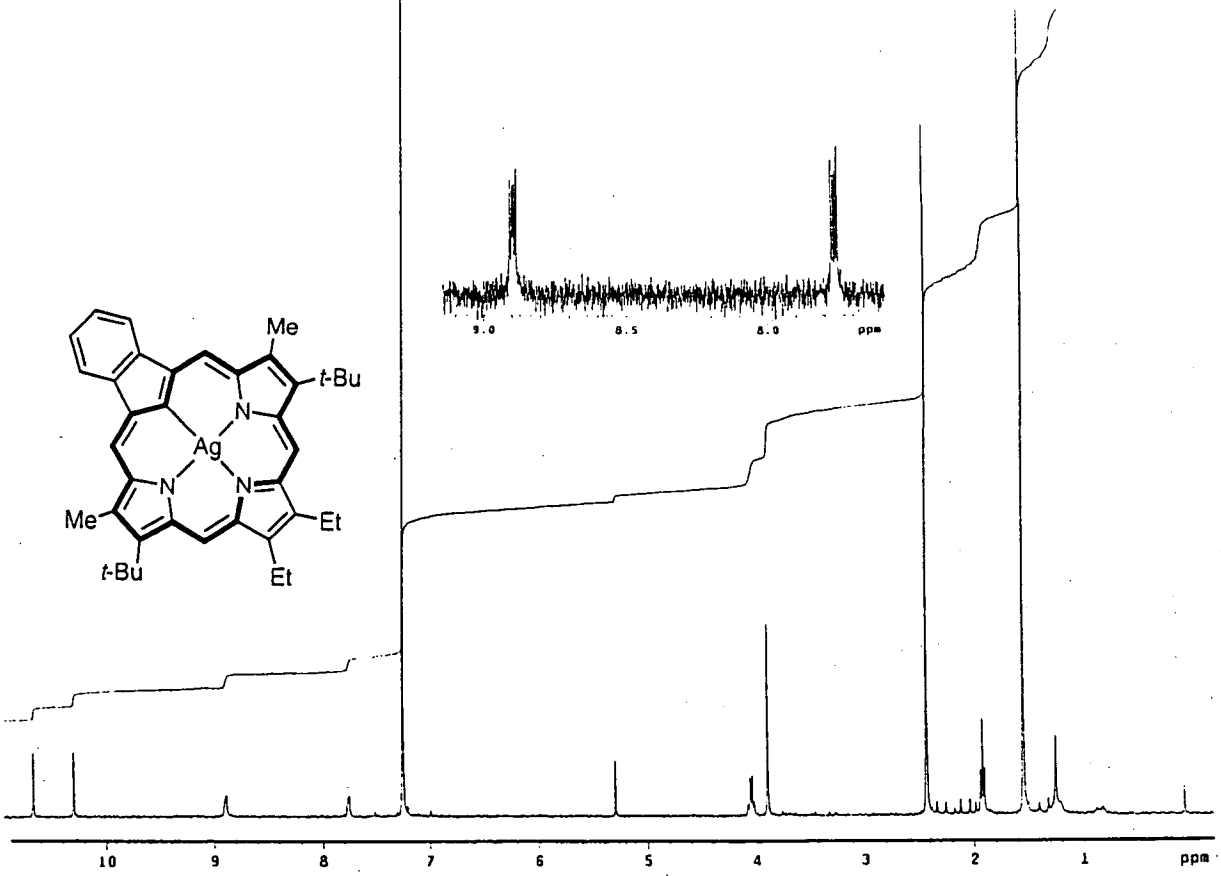




Figure S15: Upper spectrum: 400 MHz proton NMR of gold(III) complex **19** in $CDCl_3$.
Lower spectrum: 100 MHz carbon-13 NMR of silver(III) di-*tert*-butyl complex **15c** in $CDCl_3$.



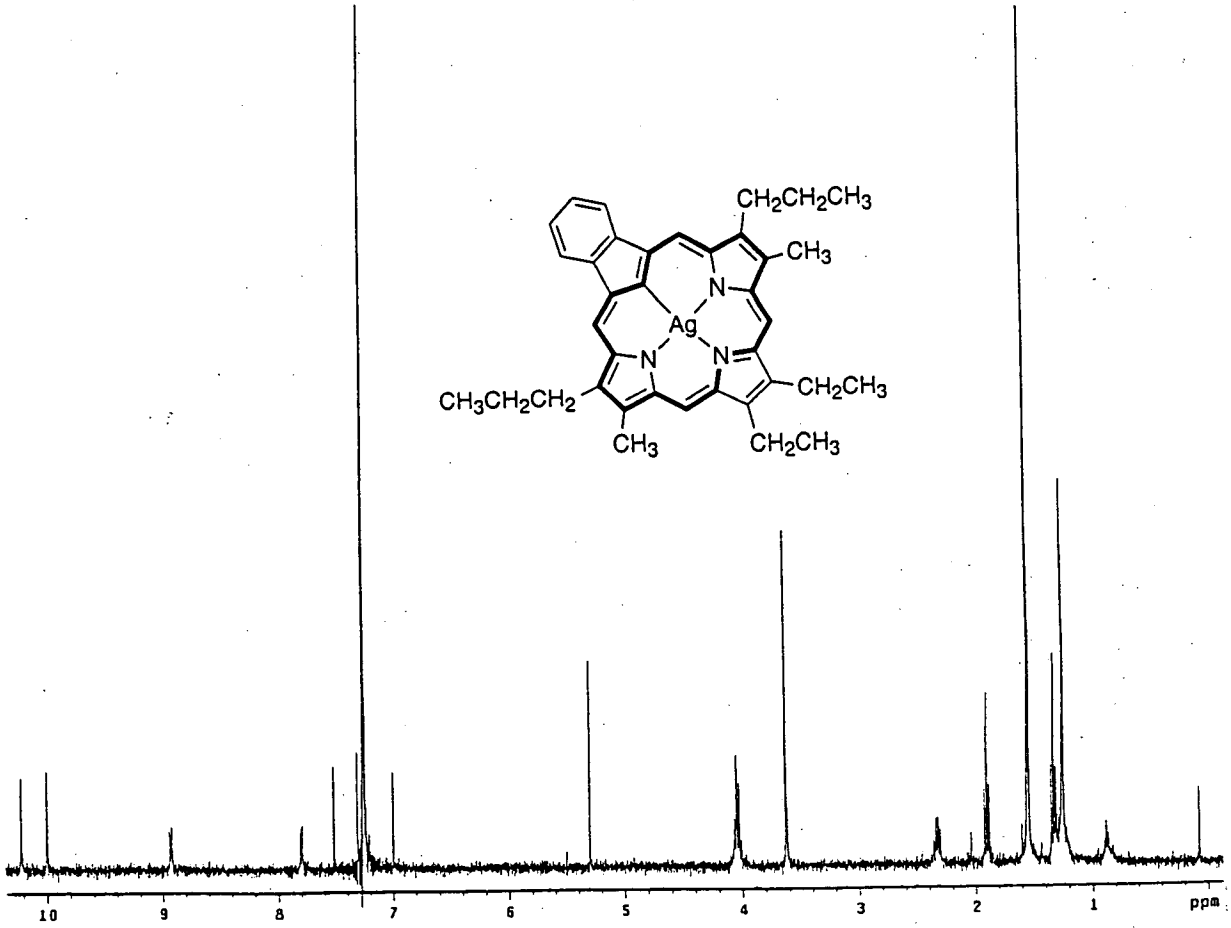




Figure S16: Upper spectrum: 400 MHz proton NMR of silver(III) di-*tert*-butylcarbaporphyrin **15c** in $CDCl_3$.
Lower spectrum: 400 MHz proton NMR of silver(III) dipropylcarbaporphyrin **15d** in $CDCl_3$.

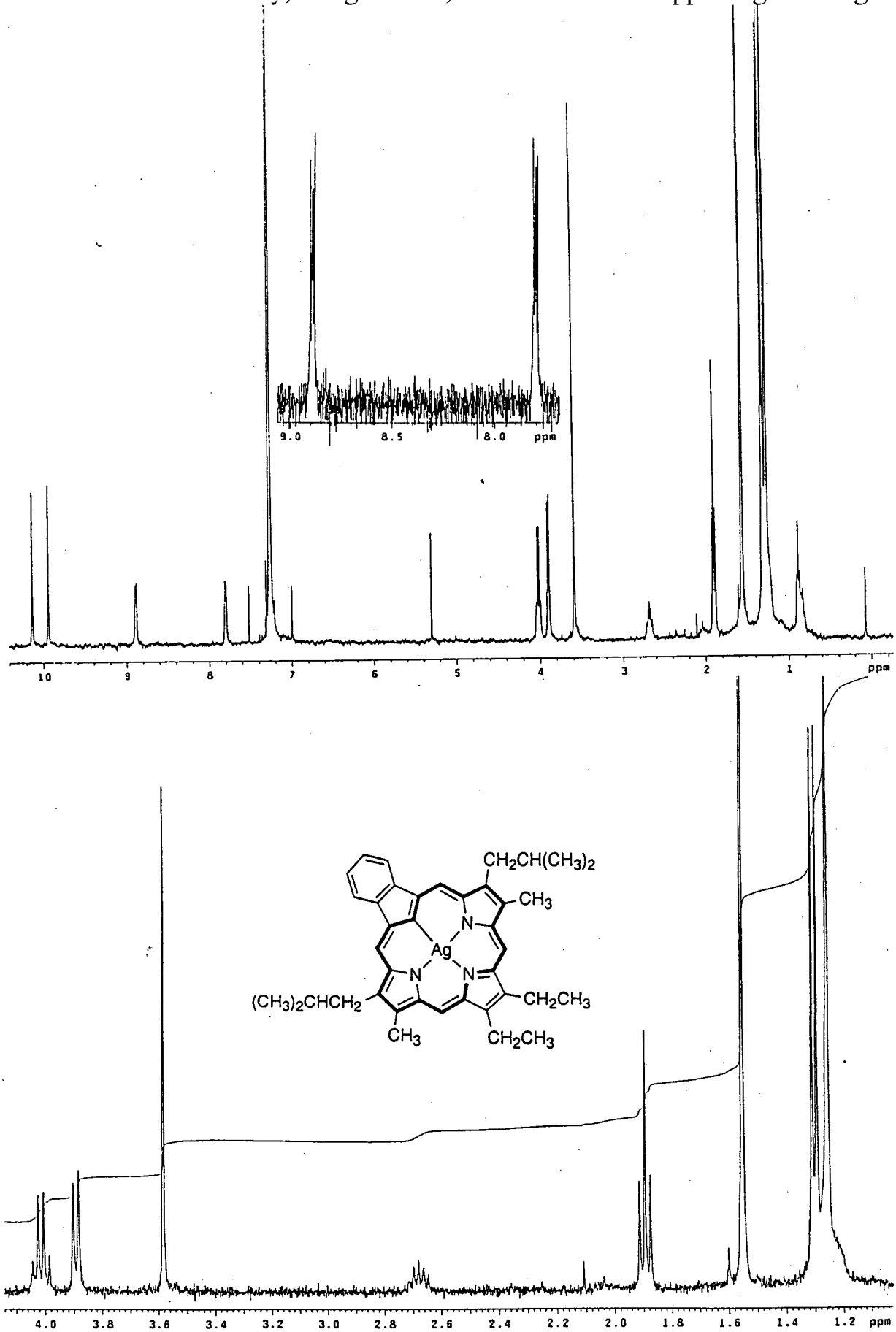
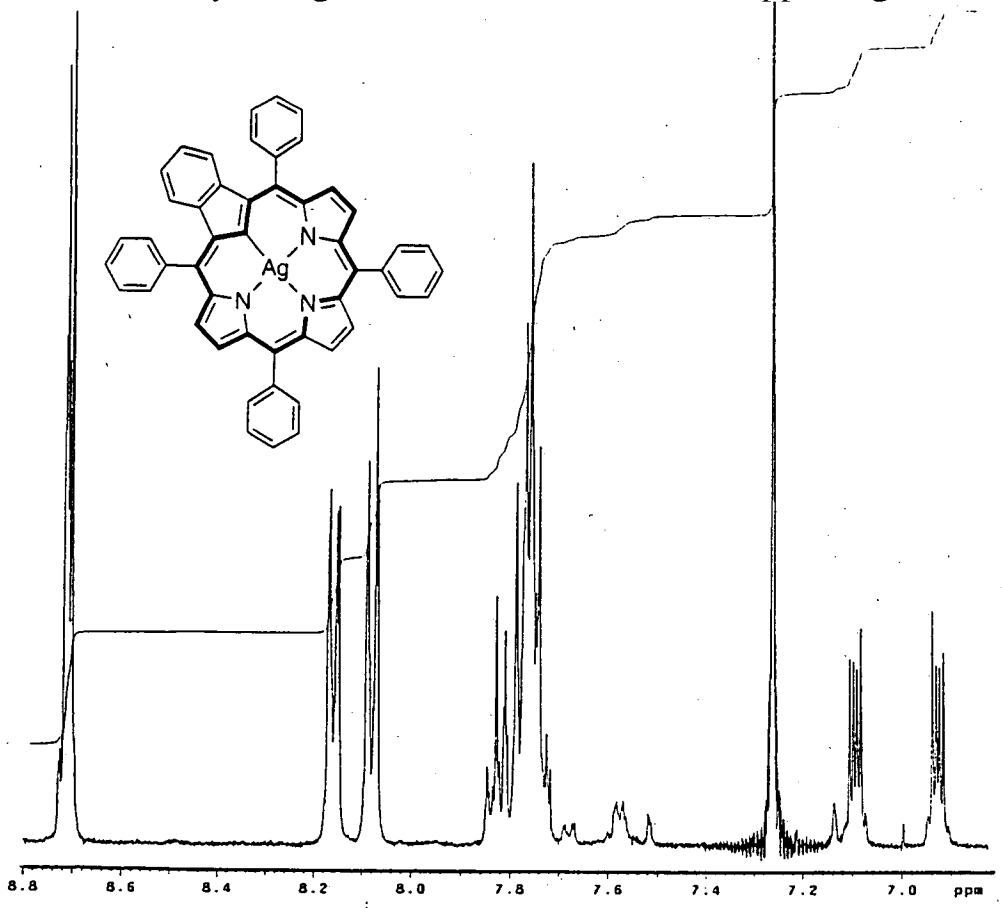



Figure S17: Upper spectrum: 400 MHz proton NMR of silver(III) diisobutylcarbaporphyrin **15e** in $CDCl_3$. Lower spectrum: Details of the aliphatic region.



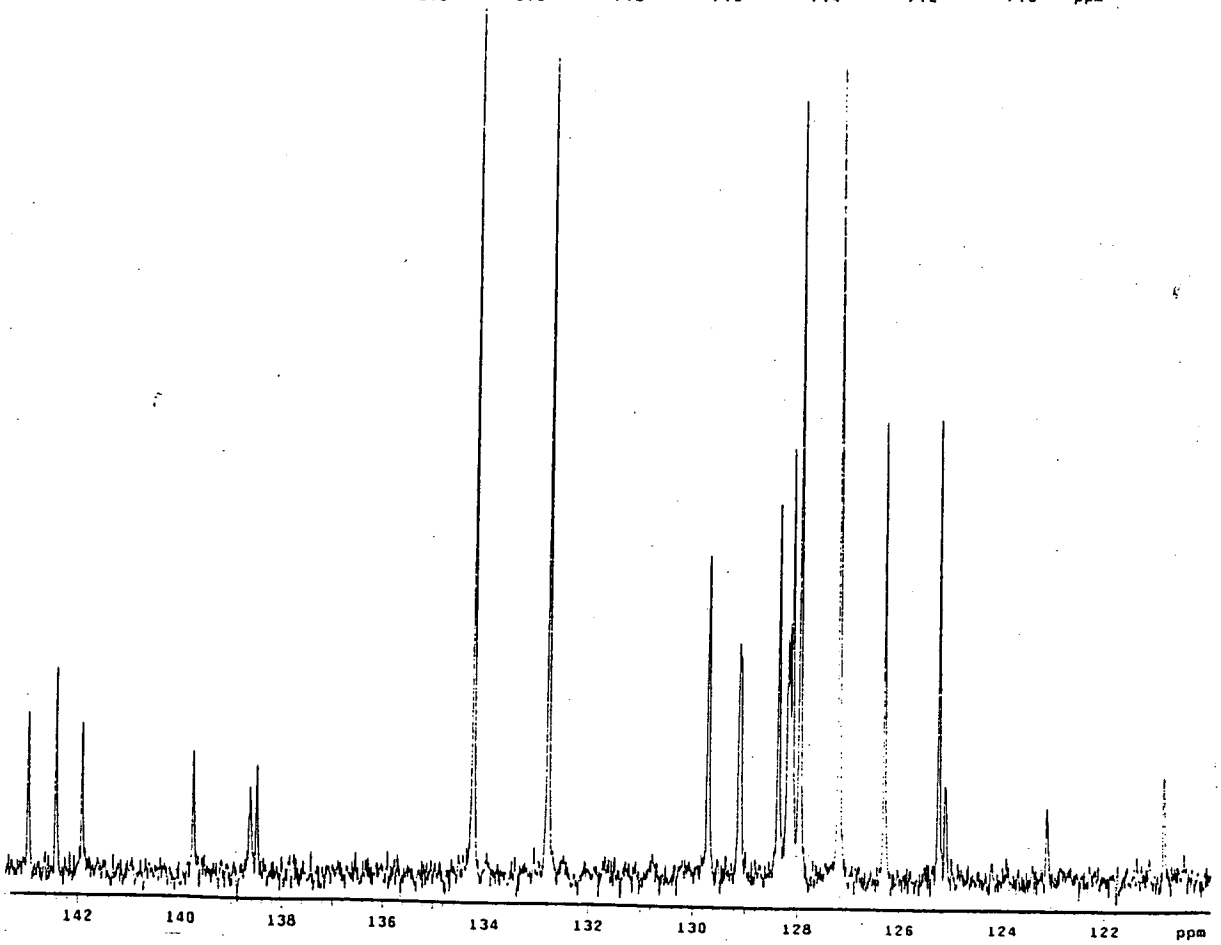




Figure S18: NMR Spectra of silver(III) tetraphenylcarbaporphyrin **17a** in $CDCl_3$.
Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.

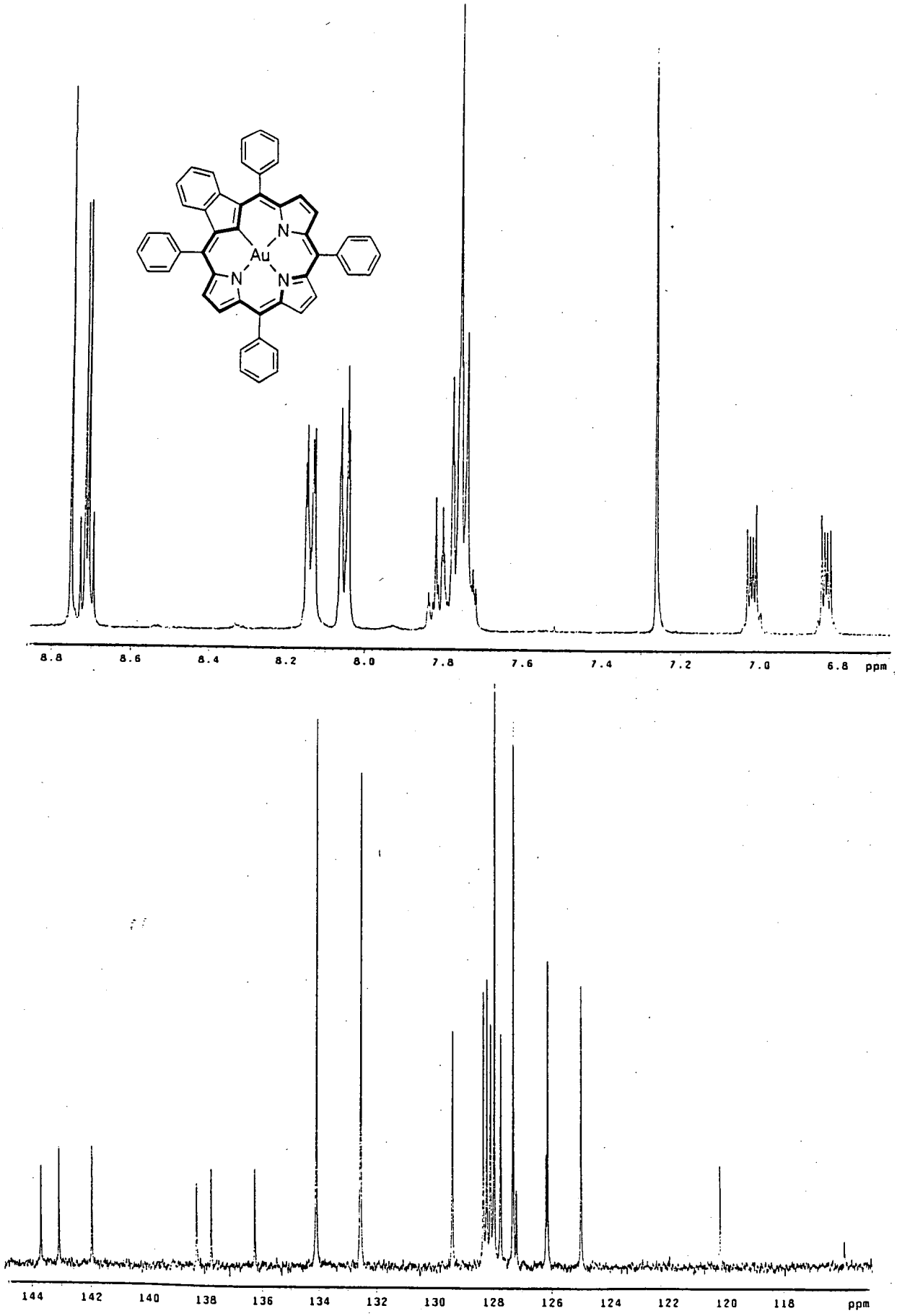



Figure S19: NMR Spectra of gold(III) tetraphenylcarbaporphyrin **18a** in $CDCl_3$.
Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.

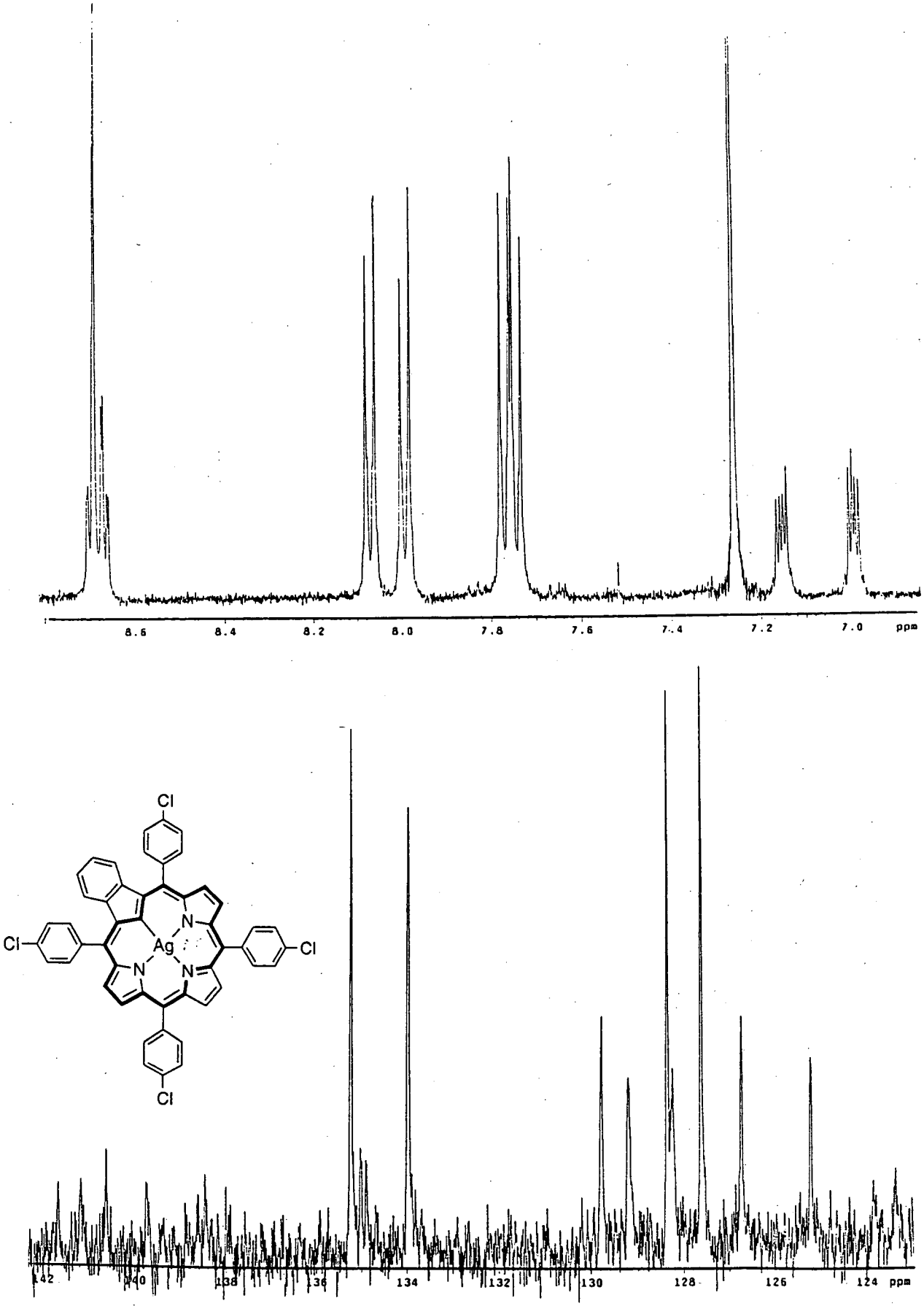



Figure S20: NMR Spectra of silver(III) tetrakis(4-chlorophenyl)carbaporphyrin **17b** in $CDCl_3$. Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.

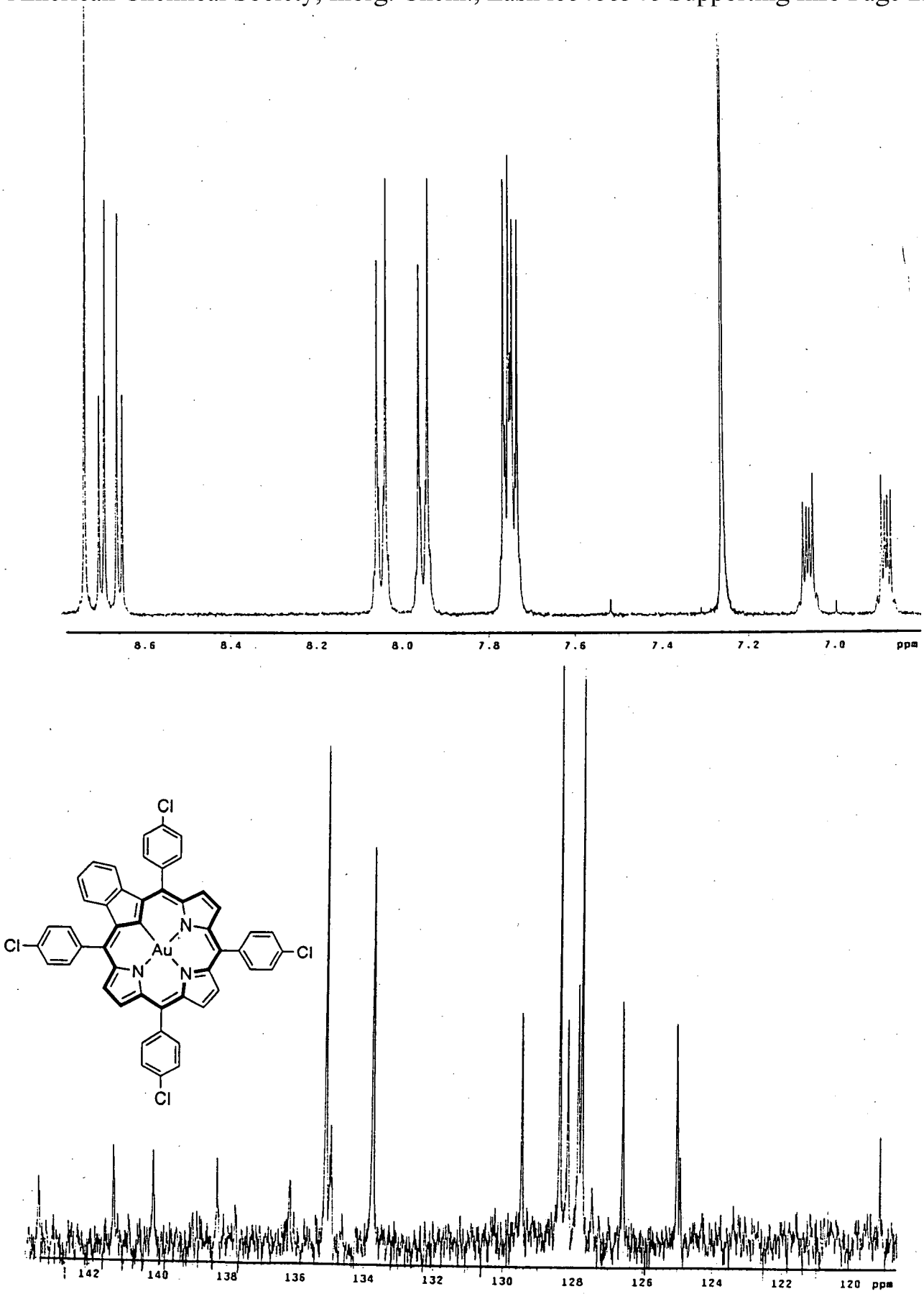



Figure S21: NMR Spectra of gold(III) tetrakis(4-chlorophenyl)carbaporphyrin **18b** in $CDCl_3$. Upper spectrum: 400 MHz proton NMR. Lower spectrum: 100 MHz carbon-13 NMR.

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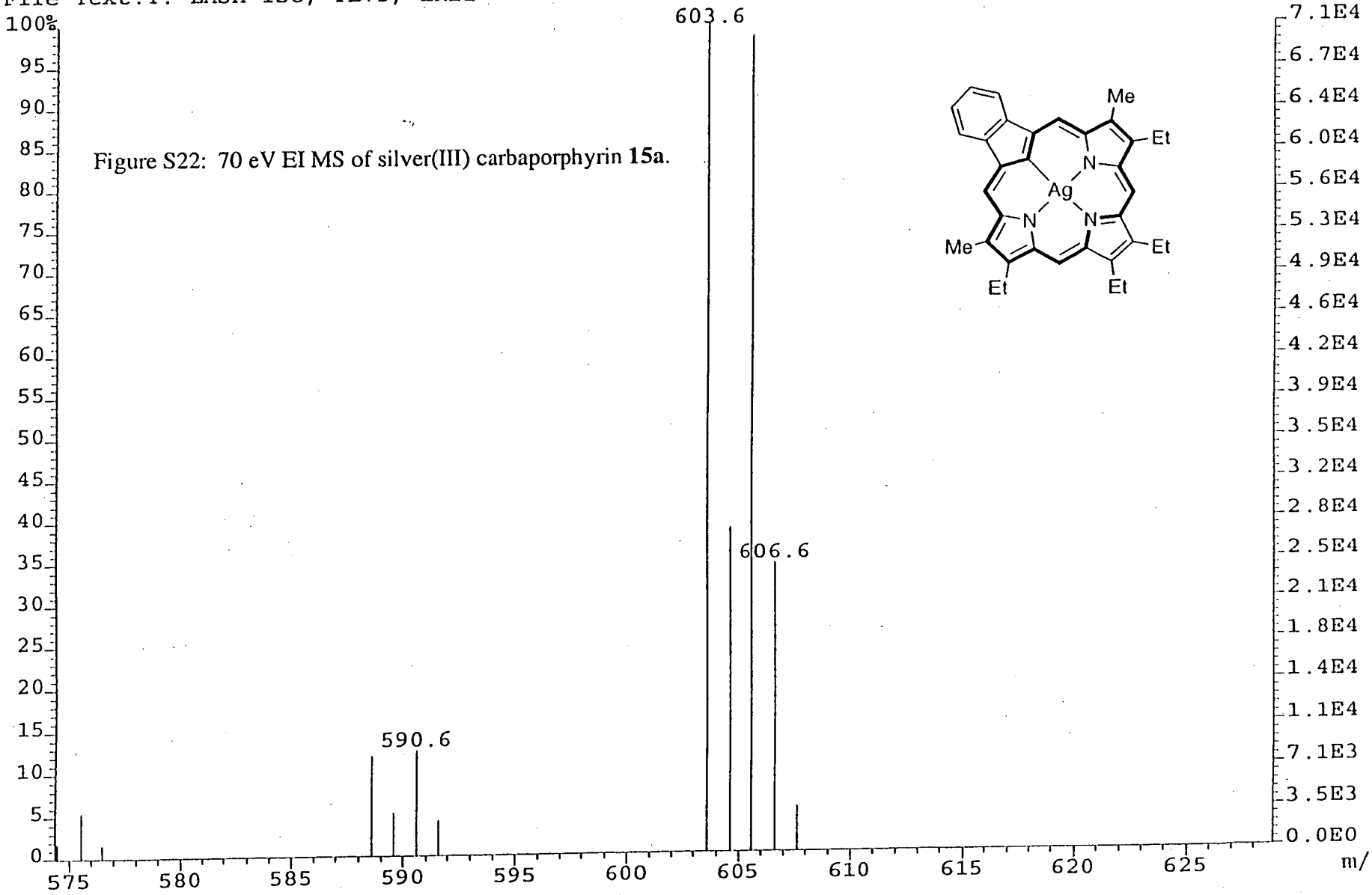
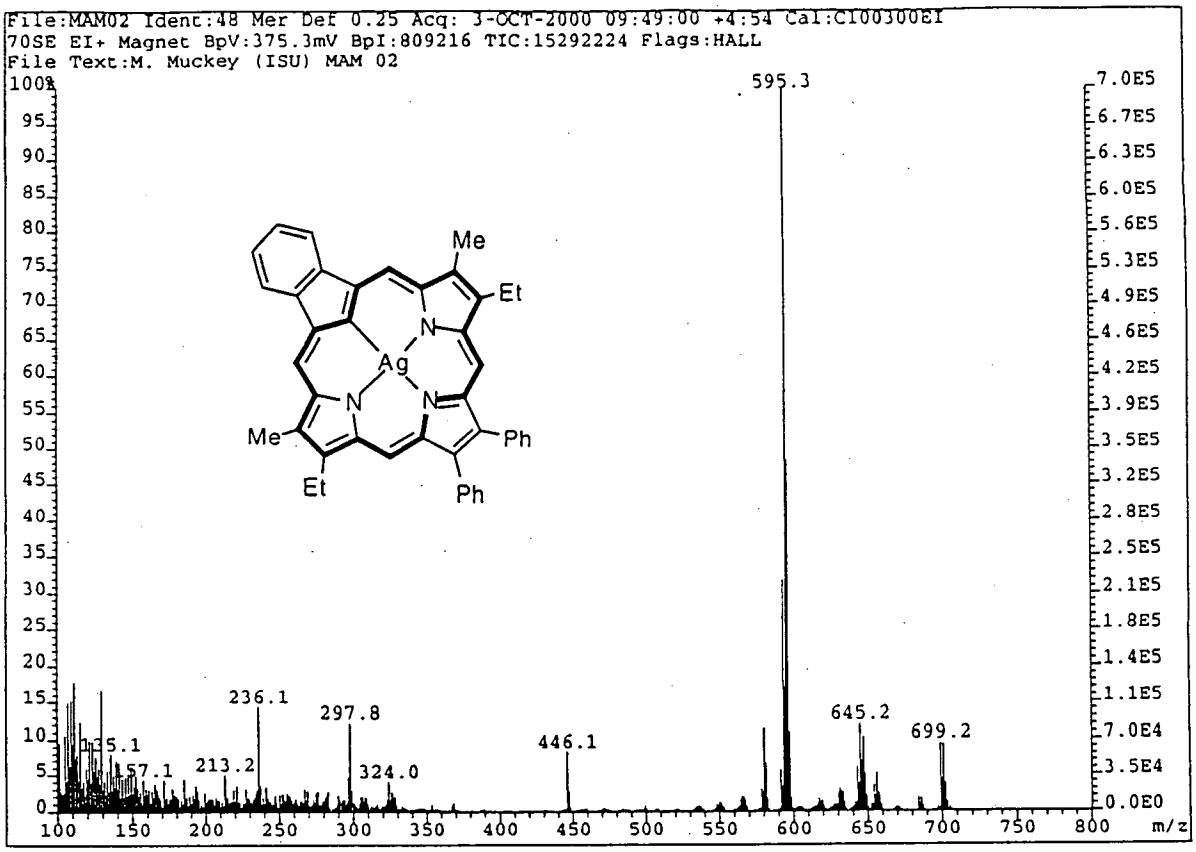



Figure S22: 70 eV EI MS of silver(III) carbaporphyrin **15a**.



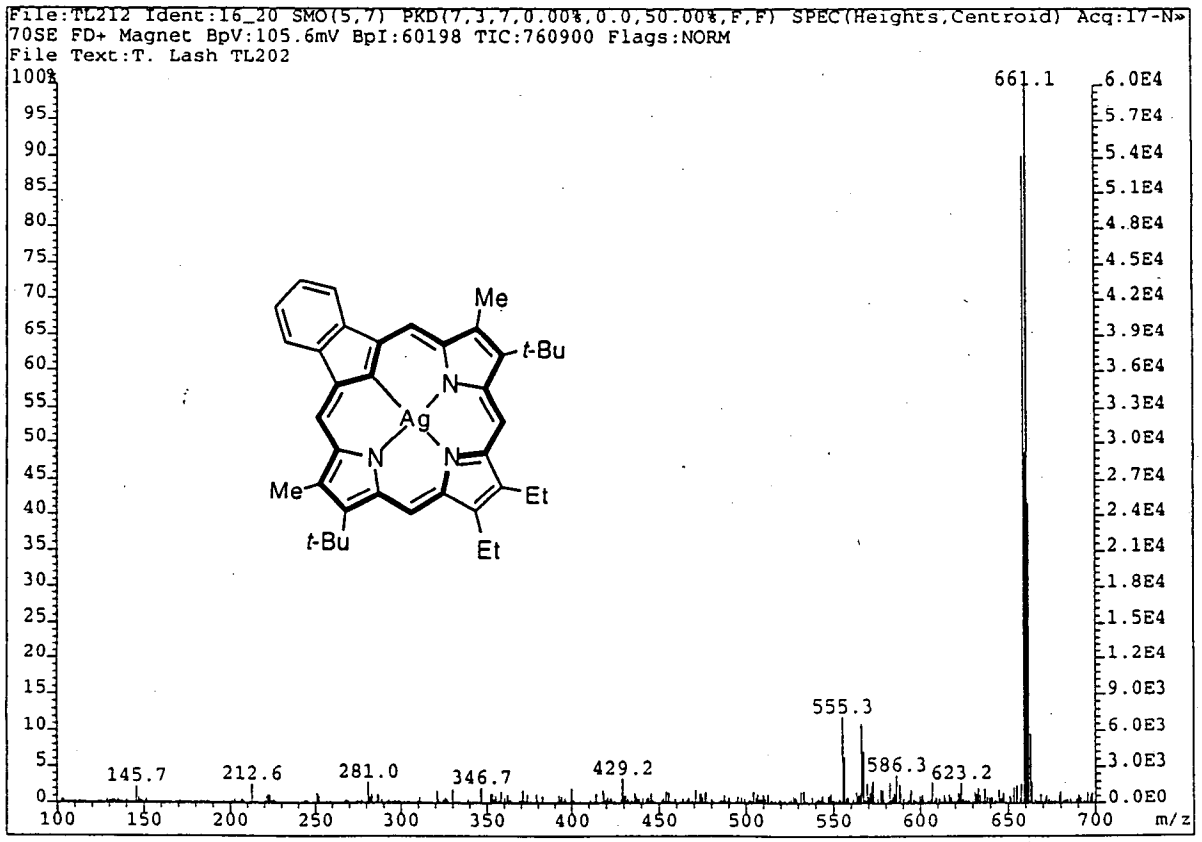




Figure S23: Upper spectrum: 70 eV EI MS of silver(III) diphenylbenzocarbaporphyrin **15b**. Lower spectrum: FD MS of silver(III) di-*tert*-butylbenzocarbaporphyrin **15c**.

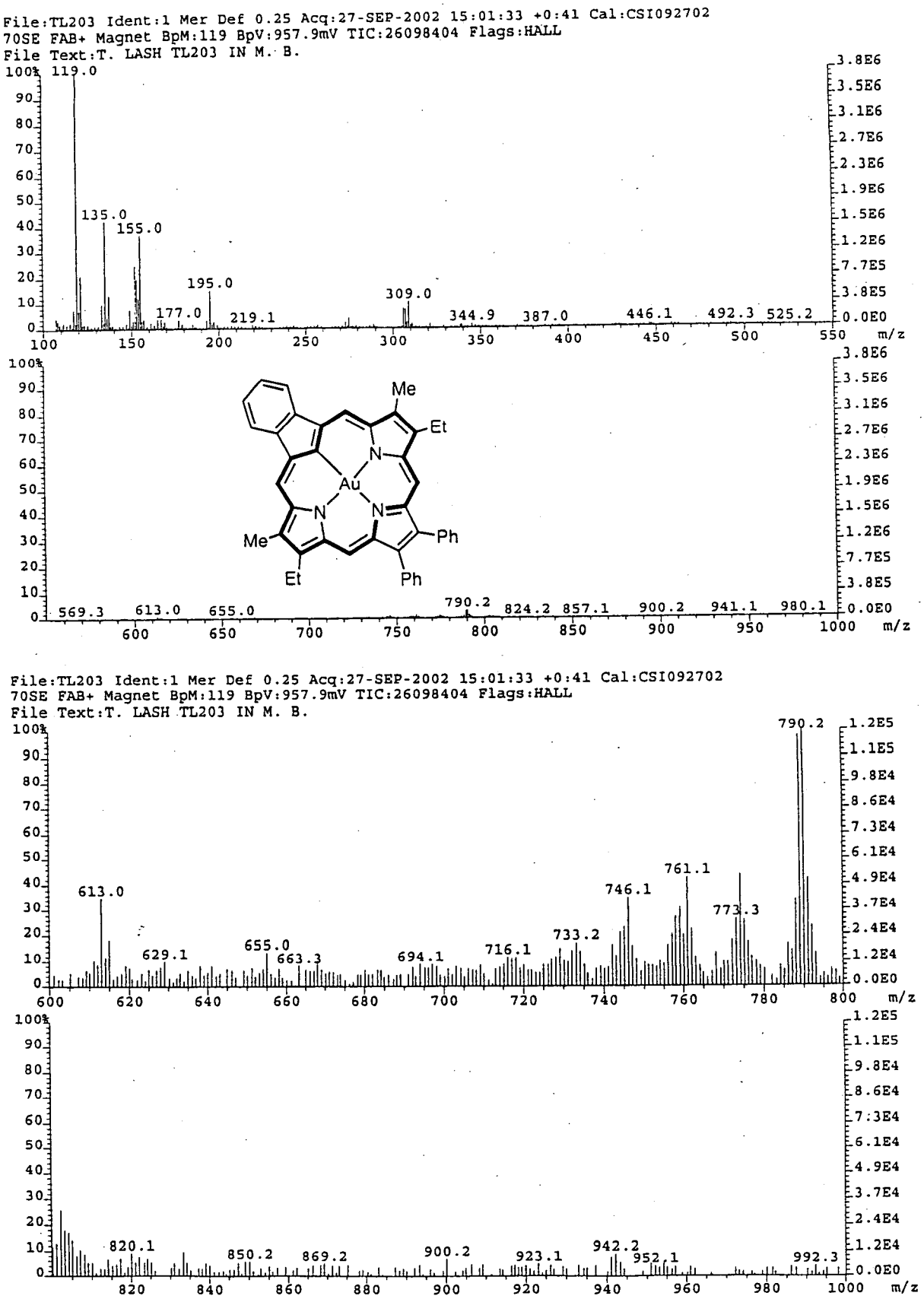
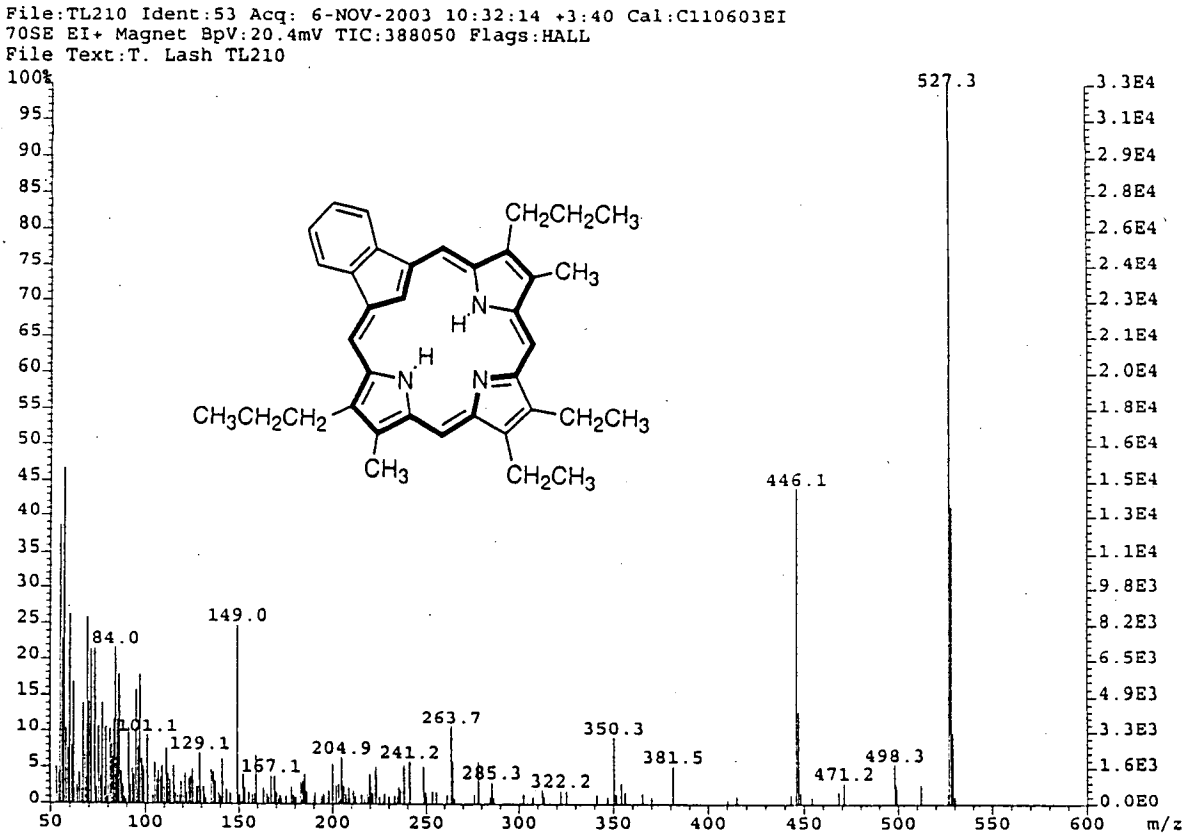



Figure S24: FAB MS of gold(III) diphenylbenzocarbaporphyrin **19**.



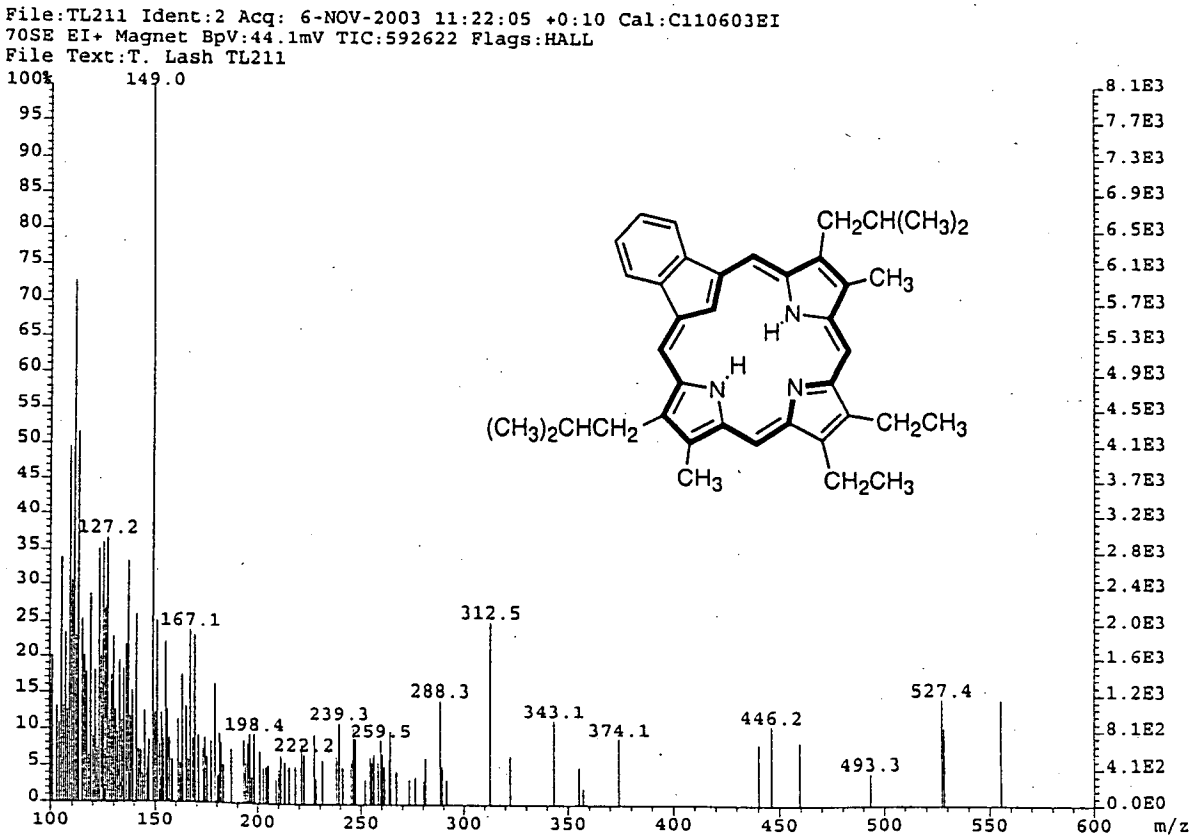




Figure S25: Upper spectrum: 70 eV EI MS of dipropylbenzocarbaporphyrin **9d**.
Lower spectrum: 70 eV EI MS of diisobutylbenzocarbaporphyrin **9e**.

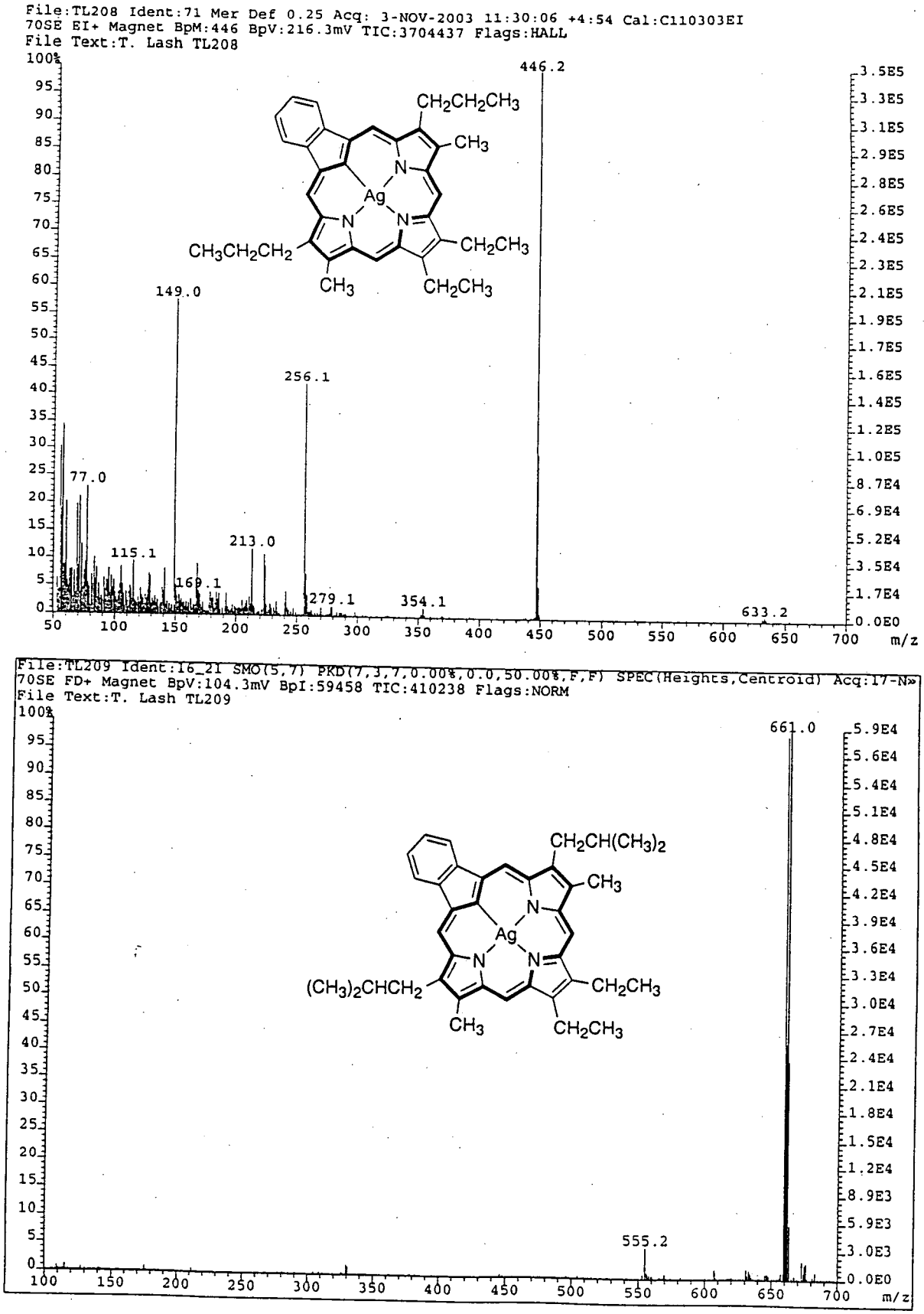



Figure S26: Upper spectrum: 70 eV EI MS of silver(III) dipropylbenzocarbaporphyrin **15d**. Lower spectrum: FD MS of silver(III) diisobutylbenzocarbaporphyrin **15e**.

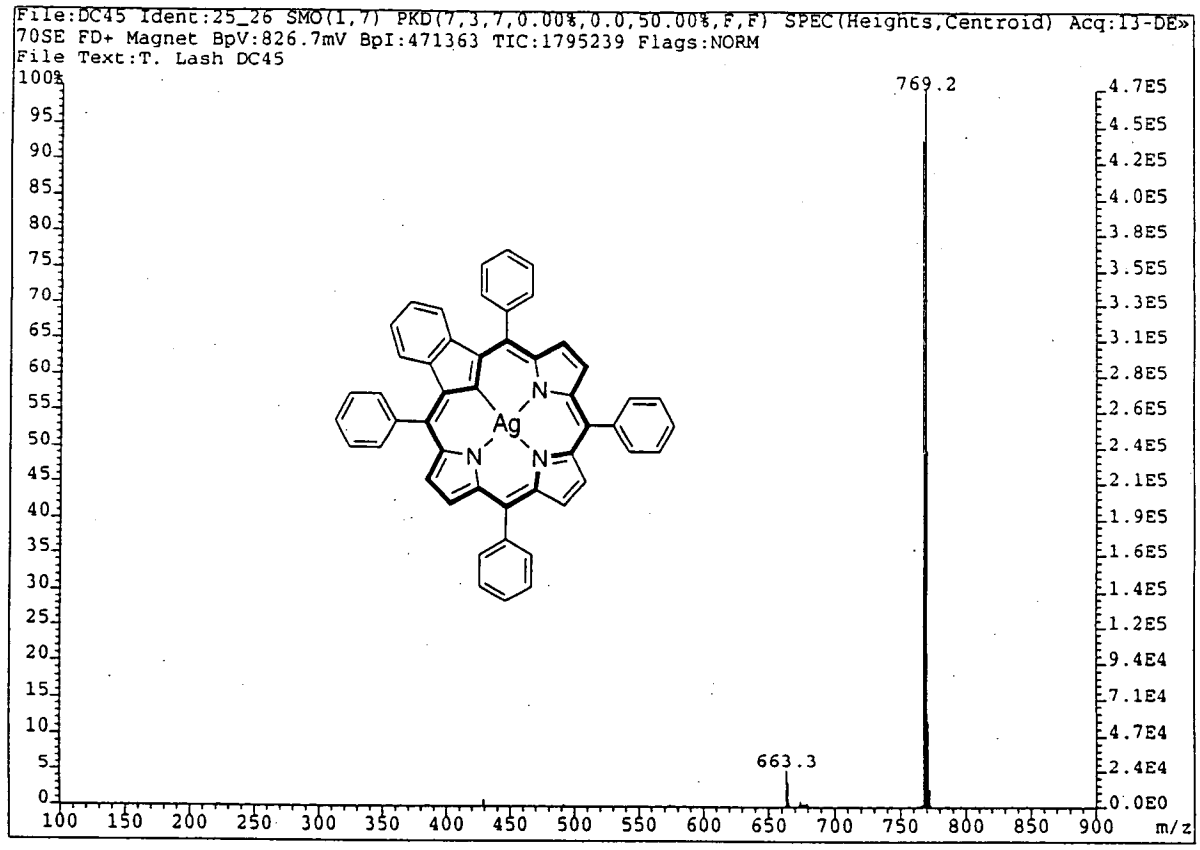
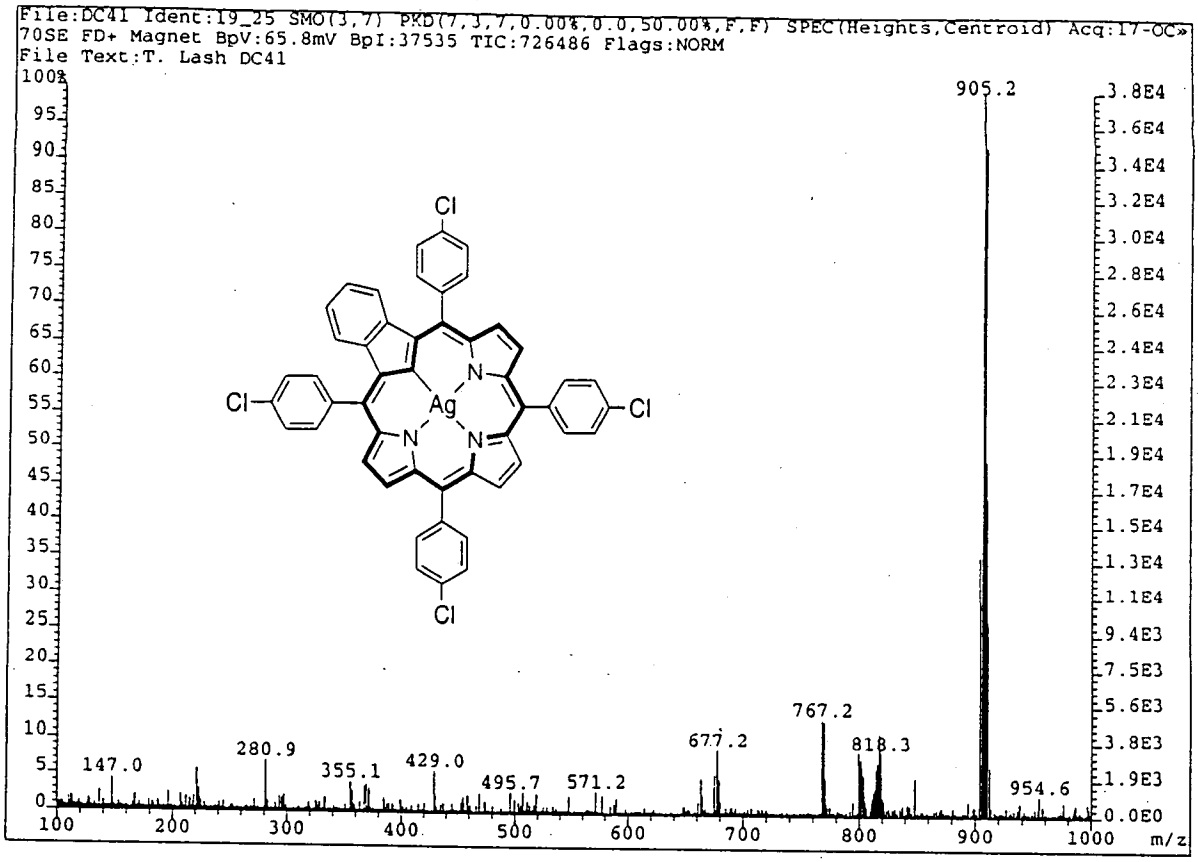



Figure S27: FD MS of silver(III) tetraphenylbenzocarbaporphyrin **17a**.



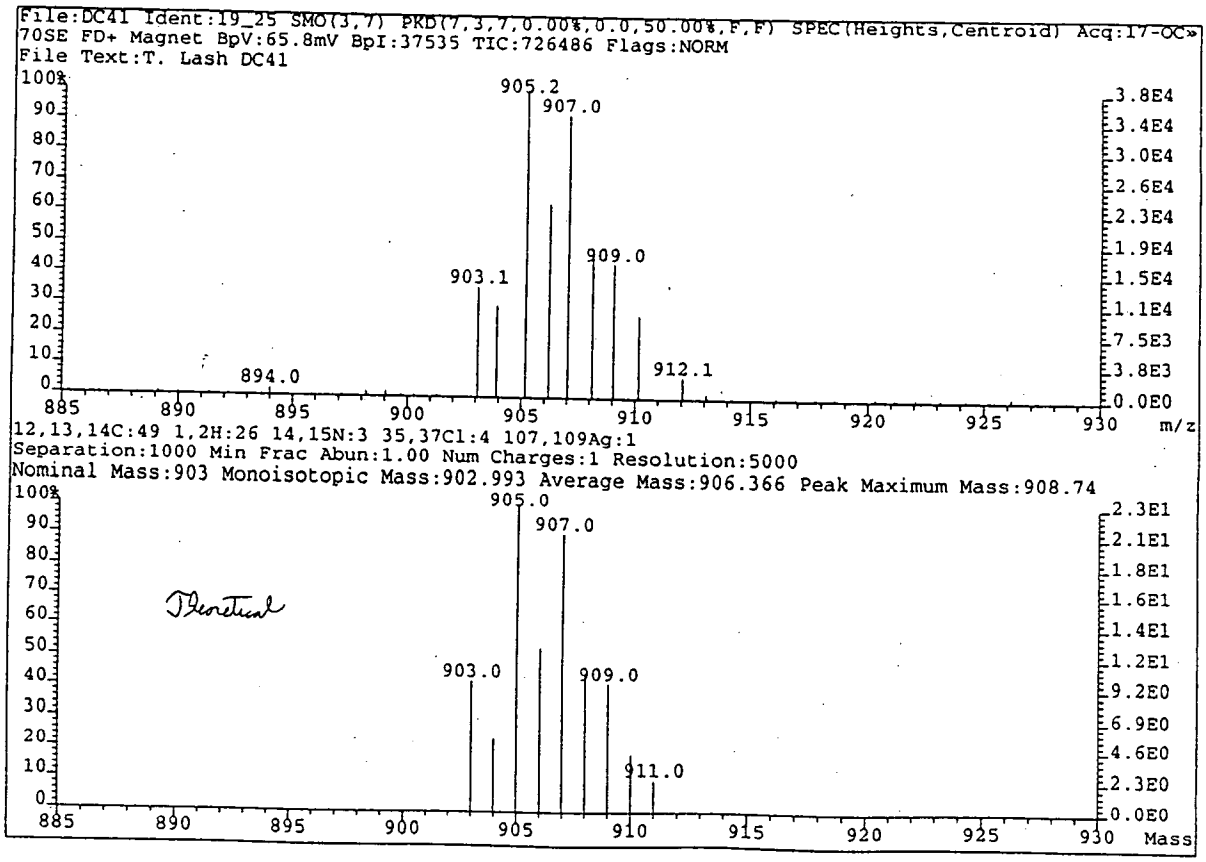
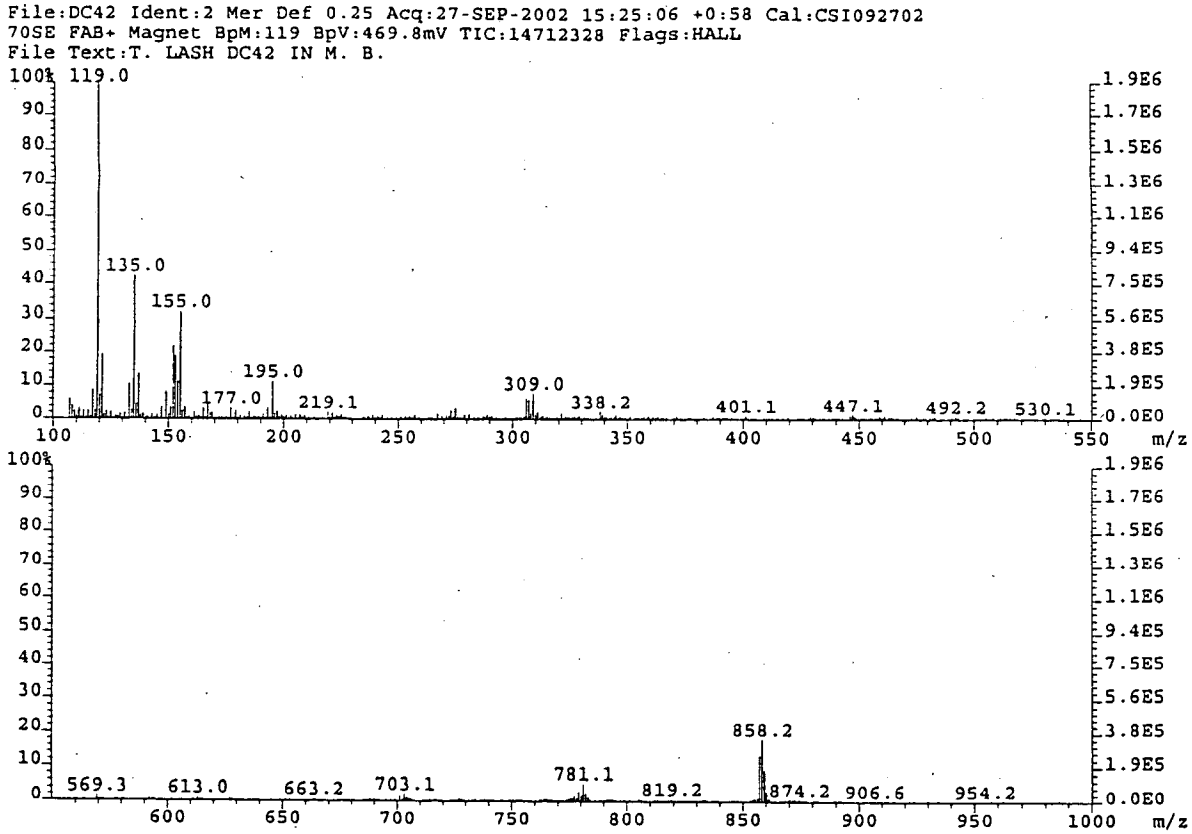




Figure S28: FD MS of silver(III) tetrakis(4-chlorophenyl)benzocarbaporphyrin **17b**.



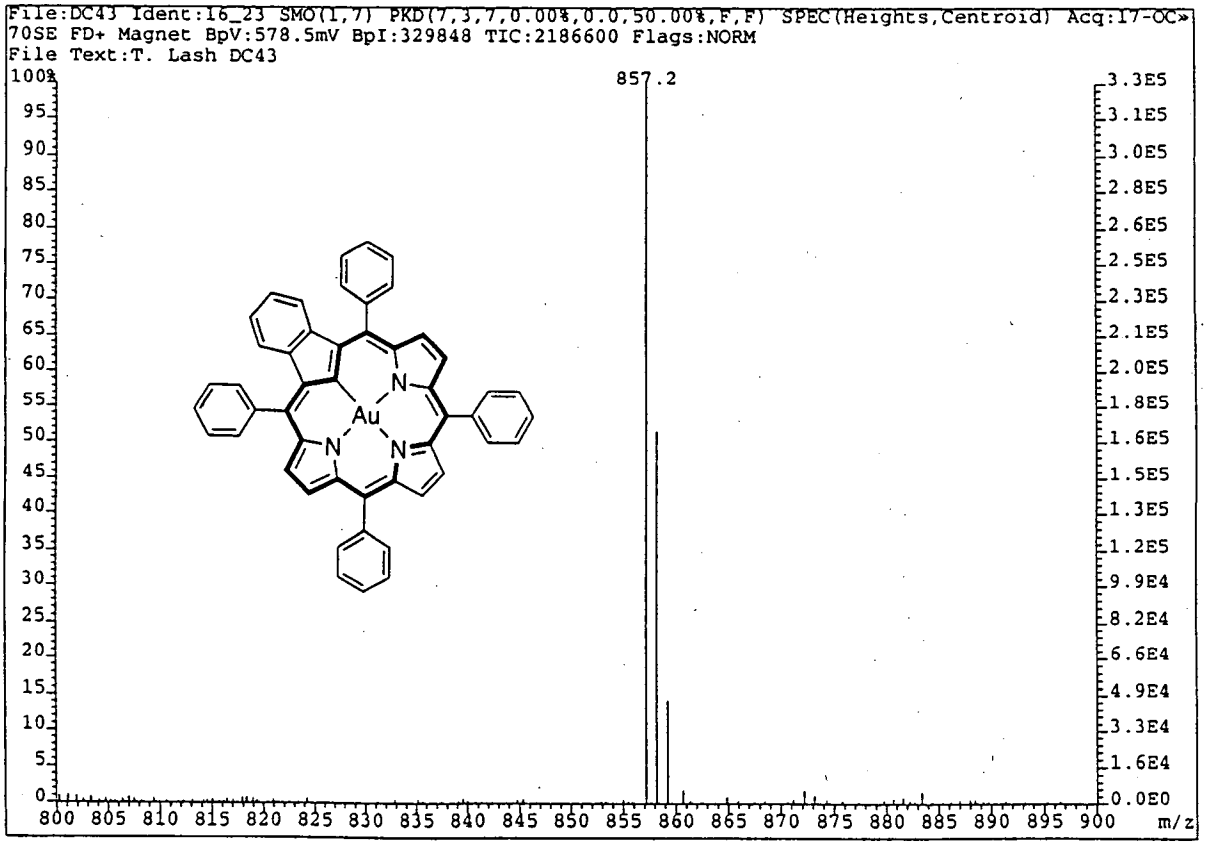




Figure S29: Mass spectra of gold(III) tetraphenylbenzocarbaporphyrin **18a**. Upper spectrum: FAB MS. Lower spectrum: FD MS.

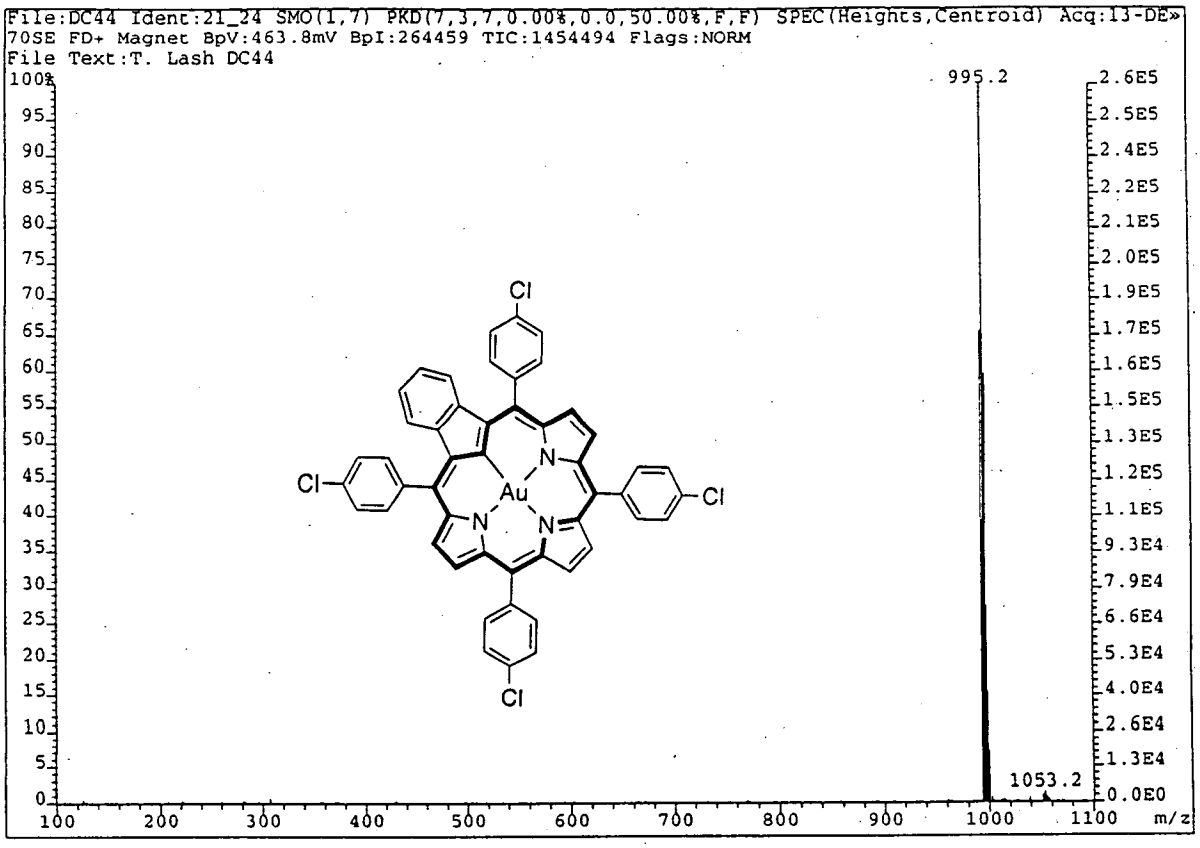



Figure S30: FD MS of gold(III) tetrakis(4-chlorophenyl)benzocarbaporphyrin **18b**.